CERTIFIED EQUIPMENT LIST

as of October 1, 1987

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control
National Institute for Occupational Safety and Health

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Mention of company name or product does not constitute endorsement by the National Institute for Occupational Safety and Health.

DHHS (NIOSH) Publication No. 88-107

NIOSH CERTIFIED EQUIPMENT

as of

October 1, 1987

Abstract

The National Institute for Occupational Safety and Health, under authorization of the Federal Mine Safety and Health Act of 1977 and the Occupational Safety and Health Act of 1970, provides a testing, approval, and certification program assuring commercial availability of safe personal protective devices and reliable industrial hazard measuring instruments. NIOSH develops improved performance regulations, tests and certifies (or approves) devices, and purchases approved and certified products on the open market to verify the quality of manufacture.

This publication (a) lists products certified as of October 1, 1986, (b) contains tables of useful information concerning certified coal mine dust personal sampler units and respirators, (c) updates the lists of approval applicants, and (d) lists some of the more common cautions and limitations for specific respirator classes.

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INTRODUCTION

The Certification Branch (CB), Division of Safety Research (DSR), National Institute for Occupational Safety and Health (NIOSH), located at 944 Chestnut Ridge Road, Morgantown, West Virginia 26505, was established to assure that certain devices and instruments used for control and evaluation of occupational hazards meet minimum performance requirements necessary to protect workers' health and safety. The functions of the CB include: (1) publish certification requirements, (2) test and certify products meeting those requirements, (3) publish lists of certified products, (4) audit manufacturers plants to determine the acceptability of their quality assurance programs, (5) sample products from the open market and test them for continued conformance to certification requirements, and (6) perform research on development of new test methods and requirements for product improvement, where necessary to assure worker protection.

This publication replaces previous lists of devices certified by NIOSH or by NIOSH and the Mine Safety and Health Administration. It does not list any devices formerly approved by the Bureau of Mines.

Certification applicants have voluntarily withdrawn certain products from the market. This withdrawal is for a variety of reasons, and replacement parts for these products may or may not be available. Other products are currently not being sold. The status of this withdrawal, the availability of parts, and sale of other products is subject to change. These products are, therefore, not listed in this publication. NIOSH advises interested persons to call (304/291-4334) or write the CB and request available information on certified products that are not listed in this publication.

Respirators are listed by approval class. General cautions and limitations are listed for each approval class. These limitations are by no means all inclusive. The respirator manufacturer may also identify further limitations or cautions for their respirators. In addition, regulatory agencies may also place a limit on the use of respirators in their standards.

Except as it purchases equipment and supplies on the open market for quality control testing, NIOSH does not have frequent internal use for personal protective equipment. It therefore welcomes information from the user concerning NIOSH certified equipment. These comments and suggestions, responses to this publication, and requests for additional information on certified products can be sent to the Chief, Certification Branch, Division of Safety Research, NIOSH, 944 Chestnut Ridge Road, Morgantown, West Virginia 26505.

I. Coal Mine Personal Sampler Units

COAL MINE DUST PERSONAL SAMPLER UNITS

I. Certification of Coal Mine Dust Personal Sampler Units.

A coal mine dust personal sampler unit (CMDPSU) consists of a pump, a charger, and a sampling head with a 10 mm nylon cyclone and a preweighed sealed filter cassette. It is used--as a unit--for collecting the mandatory coal mine atmosphere samples as required under the Federal Mine Safety and Health Act of 1977. The sampling requirements are detailed in Title 30, Part 70 of the Code of Federal Regulations.

All certified CMDPSU's must have prior approval by the Mine Safety and Health Administration, Department of Labor, to meet the 2G-2239 Electrical Permissibility requirements. The performance of the CMDPSU's is certified by NIOSH under Title 30, Part 74 of the Code of Federal Regulations. As of October 1, 1987, the following CMDPSU's are certified by NIOSH:

CERTIFICATION NUMBER	CERTIFICATE HOLDER	MODEL
TC-74-015	MSA	G
TC-74-028	MSA	G (tamperproof cassette)
TC-74-029	MSA	1 (Flow-lite)

NAMES AND ADDRESSES OF MANUFACTURERS AND DISTRIBUTORS

Mine Safety Appliances Company, P.O. Box 426, Pittsburgh, PA 15230

II. RESPIRATORY PROTECTIVE DEVICES

HOW TO USE THE RESPIRATOR TABLES

Most readers of the "NIOSH Certified Equipment List" use it to answer two basic questions about respiratory protection:

1. What is the appropriate respirator to use? and,

2. Is this respirator approved?

The Respiratory Protective Devices (Respirator) Section is divided into two series of tables to allow the user to readily find the answers to these two questions.

Respirator Selection

The selection of an appropriate respirator for use in a given situation can only be made by carefully considering a series of interrelated environmental, equipment, work situation and human factors.

Once a selection by specific type is made, then a user can refer to the specific section for a list of all approved devices of that type. These types are:

A. Self-contained Breathing Apparatus
   1. Entry Into and Escape
      a. Open circuit pressure demand
      b. Open circuit demand
      c. Closed circuit
   2. Escape Only
      a. Open circuit (pressure demand, demand or continuous flow)
      b. Closed circuit
   3. Combination Self-contained Breathing Apparatus and Supplied-air Respirators

B. Gas Mask
   1. Ammonia
   2. Chlorine
   3. Sulfur Dioxide
   4. Acid Gases
   5. Organic Vapors
   6. Carbon Monoxide
   7. Pesticides
   8. Other gases and vapors

C. Supplied Air Respirators
   1. Type C Continuous Flow
   2. Type C Pressure Demand
   3. Type C Demand
   4. Type CE Continuous Flow Abrasive Blasting
   5. Type A
   6. Type B

D. Particulate
   1. Single Use
   2. Dusts and Mists
   3. Dusts, Fumes and Mists
   4. High Efficiency

E. Chemical Cartridges
   1. Ammonia
   2. Methyl Amine
   3. Chlorine
   4. Hydrogen Chloride
   5. Sulfur Dioxide
   6. Organic Vapor
   7. Paints, Lacquers and Enamels
   8. Pesticides
   9. Vinyl Chloride
   10. Other Gases and Vapors

F. Powered Air Purifiers
   1. Gas Masks
   2. Particulate
   3. Chemical Cartridge

G. Vinyl Chloride Respirators

For example, if your need was for a self-contained breathing apparatus for use in escaping from a laboratory fire in which the travel distance to safety was 100 feet, then your choice might be an escape self-contained breathing apparatus (SCBA) with a relatively short duration or service life. Turning to Section A(2) Escape Only Self Contained Breathing Apparatus, you would find that the TC-13F-28 approval (among others) has been granted for escape self-contained breathing apparatus (Es) with a service life of 5 minutes.

Abbreviations and Definitions of Terms and Symbols Used in Lists

Respirator Type

A Hose mask respirator, for entry into and escape from atmospheres not immediately dangerous to life or health, which consists of a motor-driven or hand-operated blower that permits the free entrance of air when the blower is not operating, a strong large-diameter hose having a low resistance to air flow.

AE Supplied-air respirator. A type A supplied air respirator equipped with additional devices designed to protect the wearer's head and neck against impact and abrasion from rebounding abrasive material, and with shielding material such as plastic, glass, woven wire, sheet metal, or other suitable material to protect the window(s) of facepieces, hoods, and helmets which do not unduly interfere with the wearer's vision and permit easy access to the external surface of such window(s) for cleaning.

B Supplied-air respirator. A hose mask respirator, for entry into and escape from atmospheres not immediately dangerous to life or health, which consists of a strong large diameter hose with low resistance to airflow through which the user draws inspired air by means of his lungs alone, a harness to which the hose is attached, and a tight-fitting facepiece.

BE Supplied-air respirator. A type B supplied-air respirator equipped with additional devices designed to protect the wearer's head and neck against impact and abrasion from rebounding abrasive material, and with shielding material such as plastic, glass, woven wire, sheet metal, or other suitable material to protect the window(s) of facepieces, hoods, and helmets which do not unduly interfere with the wearer's vision and permit
easy access to the external surface of such window(s) for cleaning.

C Supplied-air respirators. An airline respirator, for entry into and escape from atmospheres not immediately dangerous to life or health, which consists of a source of respirable breathing air, a hose, a detachable coupling, a control valve, orifice, a demand valve or pressure demand valve, an arrangement for attaching the hose to the wearer and a facepiece, hood, or helmet.

CE Supplied-air respirator. A type C supplied-air respirator equipped with additional devices designed to protect the wearer's head and neck against impact and abrasion from rebounding abrasive material, and with shielding material such as plastic, glass, woven wire, sheet metal, or other suitable material to protect the window(s) of facepieces, hoods, and helmets which do not unduly interfere with the wearer's vision and permit easy access to the external surface of such window(s) for cleaning.

CF Continuous flow. Type C supplied air respirator which supplies respirable air at a constant flow.

CC Closed-circuit apparatus. An apparatus of the type in which the exhalation is rebreathed by the wearer after the carbon dioxide has been effectively removed and a suitable oxygen concentration restored from sources composed of: (i) Compressed oxygen; or (ii) Chemical oxygen; or (iii) Liquid-oxygen.

ODM	Open circuit demand type - An apparatus in which the pressure inside the facepiece in relation to the immediate environment is positive during exhalation and negative during inhalation and from which exhalation is vented to the atmosphere and not rebreathed.
OPD	Open circuit pressure demand type. An apparatus in which the pressure inside the facepiece in relation to the immediate environment is positive during both inhalation and exhalation and from which exhalation is vented to the atmosphere and not rebreathed.
GEN	Oxygen generating respirator which supplies oxygen by means of a chemical reaction
Es	Escape only respiratory devices providing protection only during escape from hazardous atmospheres.
SAR	Supplied-air respirator. An airline respirator.
PAPR	Powered air-purifying respirator means a device equipped with a facepiece, hood, or helmet, breathing tube, canister, cartridge, filter, canister with filter, or cartridge with filter, and a blower.
Rp	Replaceable filter. A filter which is discarded after excessive resistance renders it unsuitable for further use.
Ru	Reusable filter. A filter which is cleaned and reused after excessive resistance renders it unsuitable for further use.
Su	Single use. A respirator that is entirely discarded after excessive resistance, sorbent exhaustion, or physical damage renders it unsuitable for further use.
AG	Acid gas
OV	Organic vapor
Cl	Chlorine
HCl	Hydrogen chloride
SO_2	Sulfur dioxide
CO	Carbon monoxide
NH_3	Ammonia
MA	Methyl amine
VC	Vinyl chloride
CLO2	Chlorine dioxide
CH2-O	Formaldehyde

PH_3 phosphine

H_2S hydrogen sulfide

PLE mists of paints, lacquer and enamel

Pest Pesticide means (1) any substance of mixture of substances (including solvents and impurities) intended to prevent, destroy, repel, or mitigate any insect, rodent, nematode, fungus, weed, or other form of plant or animal life or virus, and (2) any substance or mixture of substances (including solvents and impurities) intended for use as a plant regulator, defoliant, or desiccant, as defined in the Federal Insecticide, Fungicide, and Rodenticide Act of 1947, as amended (7 U.S.C. 135-135k), excluding fumigants which are applied as gases or vapors or in a solid or liquid form as pellets or poured liquids for subsequent release as gases or vapors.

DFM:

D Respirators, either with replaceable or reusable filters, designed as respiratory protection against dusts (1) having an air contamination level not less than 0.05 milligram per cubic meter of air; or (2) dusts having an air contamination level not less than 2 million particles per cubic foot of air.

F Respirators, with replaceable filters, designed as respiratory protection against fumes of various metals having an air contamination level not less than 0.05 milligram per cubic meter.

M Respirators, with replaceable filters, designed as respiratory protection against mists of materials having an air contamination level not less than 0.05 milligram per cubic meter or 2 million particles per cubic foot.

H Respirators, with replaceable filters, designed as respiratory protection against dusts, fumes, and mists having an air contamination level less than 0.05 milligram per cubic meter, and against radionuclides.

R Respirators, with replaceable filters, designed as respiratory protection against radon daughters, and radon daughters attached to dusts, fumes, and mists.

A Respirators, with replaceable filters, designed as respiratory protection against asbestos-containing dusts and mists.

S Single-use dust respirators designed as respiratory protection against pneumoconiosis- and fibrosis-producing dusts, or dusts and mists.

AB Abrasive blasting.

Z Respirators designed as respiratory protection against asbestos-containing dusts and mists, however, no longer permitted for use under the OSHA asbestos standard, 1910.1001.

Service Life

3 min.	3 minutes
5 min.	5 minutes
15 min.	15 minutes
30 min.	30 minutes
45 min.	45 minutes
1 hr.	1 hour

Breathing Gas

A	Compressed Air
O	Compressed Oxygen

Facepiece Type

ON	Orinasal
FF	Full facepiece
HH	Hood or helmet
MP(M)	Mouthpiece

Regulator, valve, or canister location

Fm	Facepiece mounted
Bm	Belt, chest, or side mounted

Airflow Class

CF	Continuous flow
Dm	Demand
Pd	Pressure-demand
*	Obsolete models - these models are still approved, but no longer produced by the manufacturer

Hose Length and Pressure Range

These columns apply only to supplied air respirators (airline) or combination respirators with a supplied air component.

SELF-CONTAINED BREATHING APPARATUS (13F)

A. Self-contained Breathing Apparatus

1. Entry Into and Escape

a. Open circuit pressure demand

Approval

Approved for respiratory protection during entry into or escape from oxygen deficient atmospheres, gases and vapors.

Limitations

Use only for temperatures above the temperature listed on approval label.

Approved only when compressed air reservoir is fully charged with air meeting the requirements of the Compressed Gas Association Specification G-7.1 for Type 1, Grade D air, or equivalent specifications.

The air container shall meet applicable DOT specifications.

Use adequate skin protection when worn in gases or vapors that poison by skin absorption.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Demand mode shall be used only when donning apparatus.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

Recommendation

NIOSH recommends that SCBA be inspected weekly if stored and immediately before use if used regularly, for breathing gas pressure.

SCBA ENTRY INTO AND ESCAPE OPEN CIRCUIT PRESSURE DEMAND

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life (min.)	Facepiece Type	Regulator Position
30	MSA	95069 96338 461696 461704 463814 463815 463831 463833 466209 470444 470445 461946 461947 470448 470449	30	FF	Bm
40	Scott	900014-00 900014-01/05/06/12/30/31/39/50/51 900214-00/01/05/06/50/51	30	FF	Bm
42	Scott	900015-00 900015-01/05/06	15	FF	Bm
45	Survivair	9038-20* 9038-22*/70*/72* 9838-22/70*/72* 9848-20/22 9849-20*/22* U9038-00 U9838-00/02 M9838-20*	30	FF	Bm
47	MSA	95063 460262 461697 461703	15	FF	Bm
59	Siebe-Gorman	014422.11	30	FF	Fm
65	ISD	900-002-267 900-002-267-21*/31*	15	ON,FF	Fm

SCBA ENTRY INTO AND ESCAPE OPEN CIRCUIT PRESSURE DEMAND

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life (min.)	Facepiece Type	Regulator Position
76	Scott	900403-00 900405-00/01/02/04/10/11/12/14/20*/21*/22*/24* 900405-30/31/32/40/41/42/34/44/50*/51*/52*/54* 900409-00/01/02/04/30/31/32/34 900455-00/01/02/04/10/11/12/14/20/21/30/31/32/34 900455-40/41/42/44/50/51 900459-00/01/02/04/30/31/32/34 930401-00/01/30/31 930403-01/10/11/30/31/40/41 930451-00/01/30/31 930453-00/01/10/11/30/31/40/41	30	FF	Fm
80	Scott	900223-00 900223/01/10/11/30/31/40/41 900223-60/61/70/71 900225-00/01/02/03*/04/10/11/12/13*/14/20*/ 900225-21*/22*/23*/-30/31/32/33*/34/40/41/42/43*/44 900225-50*/51*/52*/53*/60/61/62/64/70/71/72/74 930233-00/01/10/11/30/31/41/40/60/61/70/71 900235-00/01/02/04/10/11/12/14/30/31/32/34 900235-40/41/42/44/60/61/62/64/70/71/72/74 900229-00/01/02/04/30/31/32/34/60/61/62/64 900239-00/01/02/04/30/31/32/34/60/61/62/64 930221-00/01/30/31/60/61 930231-00/01/30/31/60/61	30	FF	Fm
82	Survivair	9045-20* 9045-22* 9845-20/22/27/28/30/31/32/33/34/35/36/37/38/39 9845-40/41/42/43	30	FF	Bm
99	Siebe-Gorman	014422.16	30	FF	Fm
100	Draeger	PA80-45 R40280 4050225	30	FF	FM
100	Draeger	C4052013	30	FF	Bm
102	ISI	707.114.00 703.116.00	30	FF	Fm

SCBA ENTRY INTO AND ESCAPE OPEN CIRCUIT PRESSURE DEMAND

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life (min.)	Facepiece Type	Regulator Position
103	Draeger	PA-80-22 R40645	30	FF	Fm
105	Survivair	9846-20 9846-22	60	FF	Bm
106	O-Two Systems	7010000-1/2 7010300-1/2/3/4 7010600-1/2/3/4/5	30	FF	Fm
107	Globe	2826-W 2826 WSM 2840-W 2840 WSM 2850-W 2850 WSM 2852 WSM 2926-W 2926 WSM 2940-W 2940 WSM 2950-W 2950 WSM 2952-W 2952 WSM C2826W C2840W C2850W C2852W U2826W U2840W U2850W U2852W	30	FF	Bm
108	Survivair	9841-00* 9840-25/26/27/28 9841-01*/02*/03*/20*/21*/22*/23* 9840-00*/01*/02*/03*/04/05/06*/07*/08/09/10*/11*/ 12/13/14/15/16/17/18/19/20*/21*/22*/23*	30	FF	Bm

SCBA ENTRY INTO AND ESCAPE OPEN CIRCUIT PRESSURE DEMAND

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life (min.)	Facepiece Type	Regulator Position
110	National Draeger	PA-80 4052013 4054305	60	FF	Bm
110	National Draeger	"C" R40280	60	FF	FM
113	Survivair	9870-00* 9870-01*/02*/03*/10*/11/12*/13/14/15/16/17 9870-18/19/20*/21*/22*/23*/24/25/26*/30*/31*/32*/33* 9871-00*/01*/02*/03*/10*/11*/12*/13*/20*/21*/22*/23* 9871-30*/31*/32*/33*	60	FF	Bm
114	Scott	900210-00* 900210-01*/02*/04*/30*/31*/32*/34* 900210-60*/61*/62*/64* 930212-00*/01*/30*/31*/60*/61*	15	FF	Fm
115	Scott	900215-00 900215-01/02/04/10/11/12/14/20*/21*/30/31/32/34 900215-40/41/42/44/50*/51*/60/61/62/64/70/71/72/74 930213-00/01/10/11/30/31/40/41/60/61/70/71 900219-00/01/02/04/30/31/32/34/60/61/62/64 930211-00/01/30/31/60/61	15	FF	Fm
128	O-Two Systems	7010200-1* 7010200-2*/3*/4* 7010601-1/2/3/4	30	FF	Bm
129	O-Two Systems	7010199-1* 7010199-2* 7010602-1/2	60	FF	Bm
130	Survivair	9842-00* 9842-01/02*/03/04/05/06/07/08/09/10/12	30	FF	Bm

SCBA ENTRY INTO AND ESCAPE OPEN CIRCUIT PRESSURE DEMAND

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life (min.)	Facepiece Type	Regulator Position
132	Interspiro	4515 608-301-320* 608-311-320 608-321-320 608-321-420 608-351-420 608-301-220* 608-311-220*	30	FF	Fm
133	Interspiro	4530 607-301-321* 607-311-321 607-321-321 607-301-121* 607-311-121*	30	FF	Fm
138	MSA	473625 thru 473634 473649 thru 473658 481216 thru 481223 484934 484936 484928 484930	30	FF	Bm
139	MSA	473268 473269 474153 474158 481253 481255 484984 484980	30	FF	Bm
140	MSA	470889 471528 474152 474155 481252 481254 484093 484979	60	FF	Bm

SCBA ENTRY INTO AND ESCAPE OPEN CIRCUIT PRESSURE DEMAND

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life (min.)	Facepiece Type	Regulator Position
164	National Draeger	4050212 thru 4050219 4050226 thru 4050233 4054269 thru 4054274	30	FF	OPD
169	MSA	476009 476010 476013 476014	15	FF	Fm
171	Globe	2826-2 2826-3 2840-2 2840-3 2850-2 2850-3 2852-2 2852-3 2926-2 2926-3 2940-2 2940-3 2950-2 2950-3 2952-2 2952-3	30	FF	Bm
174	National Draeger	4050304 thru 4050319 4054277 thru 4054282	30	FF	Bm
175	National Draeger	4050288 thru 4050303 4054285 thru 4054290	45	FF	Fm
177	National Draeger	4050271 4050273 4050275 4050277 4050279 4050281 4050283 4050285 4054293 thru 4054300	60	FF	Fm

SCBA ENTRY INTO AND ESCAPE OPEN CIRCUIT PRESSURE DEMAND

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life (min.)	Facepiece Type	Regulator Position
197	Interspiro	607-301-322* 607-321-322 607-311-322 607-301-222* 607-311-222*	60	FF	Fm
199	Interspiro	607-301-322 607-311-322 607-321-322	30	FF	Fm
207	Globe Safety	3426-2 3426-3 3440-2 3440-3 3450-2 3450-3 3452-2 3452-3	30	FF	Bm
208	Globe	3526-2 3526-3 3540-2 3540-3 3550-2 3550-3 3552-2 3552-3	60	FF	Bm
212	Scott	900445-00 900445-01/02/04/10/11/12/14/30/31/32/34/40/41/42/44 60/61/62/64/70/71/72/74 900449-00/01/02/04/30/31/32/34/60/61/62/64 930441-00/01/30/31/60/61 930443-00/01/30/31/60/61	45 min.	FF	Fm

b. Open Circuit Demand

Approval

Approved for respiratory protection during entry into or escape from oxygen deficient atmospheres, gases and vapors.

Limitations

Use only for temperatures above the temperature listed on approval label.

Approved only when compressed air reservoir is fully charged with air meeting the requirements of the Compressed Gas Association Specification G-7.1 for Type 1, Grade D air, or equivalent specifications.

The air container shall meet applicable DOT specifications.

Use adequate skin protection when worn in gases or vapors that poison by skin absorption.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

Recommendation

NIOSH recommends that SCBA be inspected weekly if stored and immediately before use if used regularly, for breathing gas pressure.

SCBA ENTRY INTO AND ESCAPE OPEN CIRCUIT DEMAND

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Breathing Gas	Service Life (min)	Facepiece Type	Regulator Position
29	MSA	95066 95071 96363 457152 457153 457154 463827 463828 463830 463832 466208 466210 470442 470443 470446 470447	A	30	FF	Bm
39	Scott	900000-00* 900000-01*/05*/30*/31*/39/*50*/51*/60*/61*	A	30	FF	Bm
41	Scott	900002-00* 900002-01*/05*	A	15	FF	Bm
43	Globe	2540-W 2540-B* 2550-W 2550-B* 2526-W 2526-B* 2552-W, 2552-B*	A	30	FF	Bm
44	Survivair	9038-00* 9038-02*/60*/62* 9838-00/02/60*/62*	A	30	FF	Bm
46	MSA	95061 95068 457150 457151	A	15	FF	Bm

SCBA ENTRY INTO AND ESCAPE OPEN CIRCUIT DEMAND

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Breathing Gas	Service Life (min)	Facepiece Type	Regulator Position
58	Siebe-Gorman	014422.10	A	30	FF	Fm
73	Scott	900400-00* 900400-01*/02*/04*/30*/31*/32*/34*/60*/61*/62*/64* 930402-00*/01*/30*/31*/60*/61* 900450-00*/01*/02*/04*/30*/31*/32*/34* -60*/61*/62*/64* 930452-00*/01*/30*/31*/60*/61	A	30	FF	Fm
79	Scott	900220-00* 900220-01*/02*/04*/30*/31*/32*/34*/60*/61*/62*/64* 930222-00*/01*/30*/31*/60*/61* 900230-00*/01*/02*/04*/30*/31*/32*/34* 60*/61*/62*/64* 930232-00*/01*/30*/31*/60*/61*	A	30	FF	Fm
142	MSA	473615 thru 473624 453639 thru 473648	A	30	FF	Bm
168	MSA	476007 476008 476011 476012	A	15	FF	Fm

c. Closed circuit

Approval

Approved for respiratory protection during entry into or escape from oxygen deficient atmospheres, gases and vapors.

Limitations

Use only for temperatures above the temperature listed on approval label.

If compressed air supply is used: Approved only when compressed air reservoir is fully charged with air meeting the requirements of the Compressed Gas Association Specification G-7.1 for Type 1, Grade D air, or equivalent specifications.

If compressed oxygen or liquid oxygen supply is used: Approved for use only when the cylinder or container is charged with compressed oxygen or liquid oxygen meeting U.S.P. specifications.

If liquefied breathing air is used it must meet Type II-Grade B of higher quality.

The oxygen container shall meet applicable DOT specifications.

Use adequate skin protection when worn in gases or vapors that poison by skin absorption.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

Recommendation for Closed Circuit with Breathing Gas Cylinders

NIOSH recommends that SCBA be inspected weekly if stored and immediately before use if used regularly, for breathing gas pressure.

SCBA ENTRY INTO AND ESCAPE CLOSED CIRCUIT

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Breathing Gas	Service Life (min)	Facepiece Type	Regulator Position
27	Biomarine	BioPak 45 45-600* 45-100	O	45	FF	Bm
32	Siebe-Gorman	013831.04 013831.05 013831.07	O	180	FF	Bm
38	Draeger	BG-174A-3h (R22900)	O	180	FF	Bm
57	Draeger	BG-174-4h (R27081)	O	240	FF	Bm
60	Scott	900050-00 900050-01/02/03/04/05	O	240	FF	In back pack
84	Rexnord	BioPak 30	O	30	FF	Bm
85	Rexnord	BioPak 60	O	60	FF	Bm
176	Draeger	BG-174AP-2h (R32200)	O	120	FF	Bm
185	Rexnord	BioPak 240	O	240	FF	Bm
186	MSA	472973	O	240	FF	Bm
210	Survivair	LP 120	O	120	FF	Bm

d. Closed Circuit Pressure Demand

Approval

Approved for respiratory protection during entry into or escape from oxygen deficient atmospheres, gases and vapors.

Limitations

Do not use this apparatus where there is direct exposure to open flames or in high radiant heat. (This limitation applies to 100 percent oxygen apparatus only.)

Provide proper care, training, and maintenance of the apparatus as specifically described in the manufacturer's instructions and maintenance manuals.

After each use of this apparatus, a fully charged breathing gas container and a recharge of carbon dioxide scrubber shall be installed.

Thorough cleaning and disinfecting of facepiece, breathing tube, and breathing bag must be done in accordance with the manufacturer's instructions.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

Recommendation for Closed Circuit with Breathing Gas Cylinders

NIOSH recommends that SCBA be inspected weekly if stored and immediately before use if used regularly, for breathing gas pressure.

SCBA ENTRY INTO AND ESCAPE CLOSED CIRCUIT PRESSURE DEMAND

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Breathing Gas	Service Life (min)	Facepiece Type	Regulator Position
206	Rexnord	240P	O	240	FF	Bm
209	Dragerwerk	R32200	O	120	FF	Bm

2. Escape Only

a. Open circuit (pressure demand, demand or continuous flow)

Approval

Approved for respiratory protection during escape from oxygen deficient atmospheres, gases and vapors.

Limitations

Use only for temperatures above the temperature listed on approval label.

Approved only when compressed air reservoir is fully charged with air meeting the requirements of the Compressed Gas Association Specification G-7.1 for Type 1, Grade D air, or equivalent specifications.

The air container shall meet applicable DOT specifications.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

OSHA regulations require that escape respirators be inspected monthly.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

Recommendation

NIOSH recommends that SCBA be inspected weekly if stored and immediately before use if used regularly, for breathing gas pressure.

SCBA ESCAPE ONLY OPEN CIRCUIT

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life (min.)	Facepiece Type	Respirator Type
28	ISD	900-002-268-01* 900-002-268-02* 900-002-268-11* 900-002-268-12	5	HH	CF, Es
28A	Lear Siegler	5500	5	HH	CF, Es
35	Survivair	9065-03 9865-03*	15	FF	ODM, Es
36	Survivair	9069-02/11 9869-02/11	5	FF	ODM, Es
52	MSA	457156 456040	5	FF	ODM, Es
55	MSA	76753	5	MP	ODM, Es
61	MSA	456989	5	ON	ODM, Es
66	Scott	900055-01 900055/02/03/04/21/30*/31*/36/40/41/54/55/62/63	5	ON,FF	ODM, Es
71	Globe	2508	5	FF	ODM, Es
75	Globe	2503	15	FF	ODM, Es
83	MSA	465251	5	ON	ODM, Es
86	Survivair	0028-00/-03	5	HH	CF, Es
111	ISI	(ELSA) 070.117.00	5	HH	CF, Es

SCBA ESCAPE ONLY OPEN CIRCUIT

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life (min.)	Facepiece Type	Respirator Type
116	Scott	900055-42/43 900055-56/57/64/65	5	FF	OPD, Es
124	Scott	900555-01 900555-02/03/04/05/06	5	FF	OPD, Es
125	Scott	900550-01* 900550-02*/03*/04*/05*/06*	5	FF	OPD, Es
145	ISI	707.117.02	10	HH	CF, Es
166	Globe	2808 2908	5	FF	OPD, Es
167	Globe	2803 2903	15	FF	OPD, Es
172	North	845	5	HH	CF, Es
173	ISI	707.117.08	5	HH	CF, Es
178	Respiratory Systems	(L510) 100100-1 100100-11 (R410) 100100-21 (R410A) 100100-31	5	HH	CF, Es
179	Respiratory Systems	(L505) 100500-1 100500-11 (R405) 100500-21 (R405A) 100500-31	10	HH	CF, Es

SCBA ESCAPE ONLY OPEN CIRCUIT

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life (min.)	Facepiece Type	Respirator Type
181	Scott	900105-01	5	HH	CF, Es
182	National Draeger	4052143 4052226	5	HH	CF, Es
		4052250 4052251	5	HH	CF,Es
193	Respiratory Systems	100720-1 100720-11 (L-560)	5	HH	CF, Es
195	North	850	10	HH	CF, Es
198	North	855	5	HH	CF, Es
200	National Draeger	4052192 4052204	10	HH	CF, Es
201	ISI	707.117.10	5	HH	CF, Es
202	Airolife	550	10	HH	CF, Es
203	Airolife	500	5	HH	CF, Es
204	Airolife	600	10	HH	CF, Es
205	Airolife	550HF-7	7	HH	CF, Es
216	MSA	484352	5	HH	CF, Es
217	MSA	484353	5	HH	CF, Es

b. Closed circuit

Approval

Approved for respiratory protection during escape from oxygen deficient atmospheres, gases and vapors.

Limitations

Use only for temperatures above the temperature listed on approval label.

If compressed air supply is used: Approved only when compressed air reservoir is fully charged with air meeting the requirements of the Compressed Gas Association Specification G-7.1 for Type 1, Grade D air, or equivalent specifications.

If liquefied breathing air is used it must meet Type II - Grade B or higher quality.

If compressed oxygen or liquid oxygen supply is used: Approved for use only when the cylinder is charged with compressed oxygen or liquid oxygen meeting U.S.P. specifications.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

OSHA regulations require that escape respirators be inspected monthly.

MSHA regulations require that self-rescuers that are carried be inspected daily.

Cylinder must meet applicable DOT specifications.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

Recommendation for Closed Circuit with Breathing Gas Cylinders

NIOSH recommends that SCBA be inspected weekly if stored and immediately before use if used regularly, for breathing gas pressure.

SCBA ESCAPE ONLY CLOSED CIRCUIT

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life (min.)	Facepiece Type
77	MSA	304330	10 1 hour	MP
78	MSA	464213	1 hr.	MP
87	Draeger	OXY-SR60B(R31230)	60	MP
88	Scott	802300-01/02	15	HH
97	PASS	700*	60	MP
101	CSE	AU-9A1	60	MP
104	Ocenco	(EBA 6.5) 14000	60	MP
109	PASS	720*	60	FF
117	Survivair	9039-00 9040-00	60	FF
170	Romiro	150* 150S	15	MP
180	MSA	1118-705/SSR90	60	MP

3. Combination Self-contained Breathing Apparatus and Supplied-air Respirators (Demand and Pressure Demand)

Approval

Approved for respiratory protection during entry into or escape from oxygen deficient atmospheres, gases and vapors, when using air-line air supply. Approved for escape only, when using self-contained air supply. If service life is 15 minutes or longer then not more than 20% of the rated capacity of air supply can be used on entry.

Limitations

Use only for temperatures above the temperature listed on approval label.

Approved only when compressed air reservoir is fully charged with air meeting the requirements of the Compressed Gas Association Specification G-7.1 for Type 1, Grade D air, or equivalent specifications.

The air container shall meet applicable DOT specifications.

Use adequate skin protection when worn in gases or vapors that poison by skin absorption.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Use only the hose lengths and pressure ranges specified on the approval label.

If the supplied air fails open cylinder valve and proceed to fresh air immediately.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

Recommendation

NIOSH recommends that SCBA be inspected weekly if stored and immediately before use if used regularly, for breathing gas pressure.

COMBINATION SCBA AND SAR (DEMAND AND PRESSURE DEMAND

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life/SCBA (min)	Face-piece Type	Supplied Air Respirator Type	Hose Length feet	Pressure Range psi.
33	Survivair	9081-14 9881-14	5	FF	Es,ODM,SAR	4-250	50-125
34	Survivair	9081-12 9881-12	5	FF	Es,ODM,SAR	4-250	50-125
48	Scott	900006-00* 900006-/02*/08*/10*/11*/20*/21*/22*/23*/24*/25*	3 or 5	FF	Es,ODM,SAR	25-300	350-450
49	Scott	900007-00 900007-02/08/10/11/20/21/22/23/24/25	3 or 5	FF	Es,OPD,SAR	25-300	350-450
53	Survivair	9081-13 9881-13/17/32/33/34	5	FF	Es,OPD,SAR	4-250	50-125
54	Survivair	9081-15 9881-15 9881-19	5	FF	Es,OPD,SAR	4-250	50-125
56	MSA	96395 455938 455993 455994	10	FF	Es,OPD,SAR	8-300	75-90
56A	MSA	304213 304194	10	FF	Es,OPD,SAR	8-300	75-90
62	MSA	458178 458479	5	FF	Es,ODM,SAR	8-300	50-90
63	ISD	900-002-267-01*/-11*	15	ON,FF	Es,OPD,SAR	25-250	50-125
64	ISD	900-002-266-01/02/03/04/11/12/13/14	5	ON,FF	Es,OPD,SAR	25-250	50-125

COMBINATION SCBA AND SAR (DEMAND AND PRESSURE DEMAND)

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life/SCBA (min)	Face-piece Type	Supplied Air Respirator Type	Hose Length feet	Pressure Range psi.
67	Scott	900055-09 900055-10/17/18/05/06/32*/33*/58/59/50/51/66/67	5	ON,FF	Es,ODM,SAR	10-250	60-125
68	Scott	900055-13 900055-14/22/23/24/25/60/61/52/53/68/69	5	FF	Es,OPD,SAR	10-250	60-125
69	MSA	457159 456039	5	FF	Es,ODM,SAR	8-300	50-100
70	MSA	460713 461698 466556	5	FF	Es,OPD,SAR	8-300	50-100
72	Globe	2509	5	FF	Es,ODM,SAR	25-100	50-70
74	Globe	2505 2505-4	15	FF	Es,ODM,SAR	25-100	50-70
76	Scott	900403-00 930403-01/10*/11*/30/31/40*/41*/70*/71* 900405-00/01/02/04/10/11/12/14/20*/21*/22*/24* 900405-30/31/32/40/41/42/34/44/50*/51*/52*/54* 930453-00/01/10*/11*/30/31/40*/41*/70*/71* 900455-00/01/02/04/10/11/12/14/20/21/30/31/32/34 900455-40/41/42/44/50/51 900409-60/-61/-62/-64 900459-60/-61/-62/-64 900401-60/-61 930451-60/-61 900469-60/-61/-62/-64 900461-60/-61	30	FF	OPD,SAR	0-300	60-115
79	Scott	900220-00 900220-01/02/03*/04/30/31/32/33*/34 930222-00/01/30/31 900230-00/01/02/04/30/31/32/34 930232-00/01/30/31	30	FF	ODM,SAR	0-300	60-115

COMBINATION SCBA AND SAR (DEMAND AND PRESSURE DEMAND)

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life/SCBA (min)	Face-piece Type	Supplied Air Respirator Type	Hose Length feet	Pressure Range psi.
80	Scott	900223-00	30	FF	OPD,SAR	0-300	60-115
		900223/01/10/11/30/31/40/41					
		900225-00/01/02/03*/04/10/11/12/13*/14/20*/21*/22*-23*					
		900225-30/31/32/33*/34/40/41/42/43*/44/50*/51*/52*/53*					
		930233-00/01/10/11/30/31/41/40					
		900235-00/01/02/04/11/12/14/30/31/32/34/41/42					
89	MSA	465182	30	FF	ODM,SAR	25-300	50-100
		465183					
		465185					
		465186					
		465199					
		465200					
		465202					
		465203					
		470450					
		470451					
		470454					
		470455					
90	MSA	465188	30	FF	OPD,SAR	25-300	50-100
		470453					
		465189					
		465191					
		465192					
		465205					
		465206					
		465208					
		465209					
		470456					
		470452					
		470457					
91	MSA	465184	15	FF	ODM,SAR	25-300	50-100
		465187					
		465201					
		465204					
92	MSA	465190	15	FF	OPD,SAR	25-300	50-100
		465193					
		465207					
		465210					

COMBINATION SCBA AND SAR (DEMAND AND PRESSURE DEMAND)

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life/SCBA (min)	Face-piece Type	Supplied Air Respirator Type	Hose Length feet	Pressure Range psi.
93	MSA	464775 464777 472676 472684 472677 472685	30	FF	OPD,SAR	25-300	50-100
94	MSA	464776 464778	15	FF	OPD,SAR	8-300	50-100
95	Scott	900460-00* 900460-01*/02*/04*/30*/31*/32*/34*/60*/61*/62*/64* 930462-00*/01*/30*/31*/60*/61*	60	FF	ODM,SAR	0-300	60-115
96	Scott	900463-00 900463-01/10*/11*/30/31/40*/41/70*/71* 900465-00/01/02/04/10/11/12/14/20*/21*/30/31/32/34 900465-40/41/42/44/50*/51* 900469-00/01/02/04/30/31/32/34/60/61/62/64 930461-00/01/30/31/60/61 930463-10*/11*/40*/41*/70*/71*	60	FF	OPD,SAR	0-300	60-115
98	Scott	900228-00*/ 900228-01*	15	FF	OPD,SAR	25-300	450-550
112	Scott	900480-01	5	FF	CF,Es,SAR	15-250	10-15
114	Scott	900210-00 900210-01/02/04/30/31/32/34 930212-00/01/30/31	15	FF	OPM,SAR	0-300	60-115
115	Scott	900215-00 900215-01/02/04/10/11/12/14/20*/21*/30/31/32/34 900215-40/41/42/44/50*/51* 930213-00/01/10/11/30/31/40/41	15	FF	OPD,SAR	0-300	60-115
118	National Draeger	4059192 thru 4059199 4054313 thru 405318 4050443	30 (2216 psig)	FF	OPD,SAR	25-300	85-120

COMBINATION SCBA AND SAR (DEMAND AND PRESSURE DEMAND)

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life/SCBA (min)	Face-piece Type	Supplied Air Respirator Type	Hose Length feet	Pressure Range psi.
119	National Draeger	4059200 thru 4059207 4054319 thru 4054324 4050441	30 (4500 psig)	FF	OPD,SAR	25-300	85-120
120	National Draeger	4059184 thru 4059191 4054307 thru 4054312 4050442	15 (4500 psig)	FF	OPD,Es,SAR	25-300	85-120
121	Globe	2809 2809-4 C2809 C2809-4 2909 2909-4	5	FF	OPD,Es,SAR w/series 3000 fittings w/series 6000 fittings	25-250 25-100	60-75
122	Globe	2805 2805-4 C2805 C2805-4 2905 2905-4	15	FF	OPD,Es,SAR w/series 3000 fittings w/series 6000 fittings	25-250 25-100	60-75
123	MSA	470199 470740 471955 thru 471962 471989 thru 471996	5	FF	OPD,Es,SAR	8-300	65-85
126	Scott	900565-01 900565-02/03/04/05/06	5	FF	OPD,Es,SAR	0-300	60-105
127	Scott	900560-01* 900560-02*/03*/04*/05*/06*	5	FF	OPD,Es,SAR	0-300	60-105
131	Survivair	9882-00 9882-01/02/03/10/11/12/13	30	FF	OPD,SAR	25 50 75 100 150 200 250	35-125 38-125 40-125 45-125 55-125 60-125 75-125

COMBINATION SCBA AND SAR (DEMAND AND PRESSURE DEMAND)

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life/SCBA (min)	Face-piece Type	Supplied Air Respirator Type	Hose Length feet	Pressure Range psi.
132	Interspiro	608-301-220 608-311-220 608-301-320 608-311-320 608-321-320	30	FF	OPD,SAR	25-300	60-125
133	Interspiro	607-301-121 607-311-121 607-301-321 607-311-321 607-321-321	30	FF	OPD,SAR	25-300	60-125
134	Interspiro	915 915V	5	FF	OPD,Es,SAR	25-300	60-125
135	O-Two Systems	7010420-1* 7010420-2*/3*/4*/5*/6*/7*/8* 7010612-1 thru 7010612-16	30	FF	OPD,SAR	25-300	100-125
136	O-Two Systems	7010421-1* 7010421-2*/3*/4*/5*/6*/7*/8* 7010611-1 thru 7010611-16	30	FF	OPD,SAR	25-300	100-125
137	O-Two Systems	7010422-1* 7010422-2*/3*/4* 7010612-1 thru 7010612-8	60	FF	OPD,SAR	25-300	100-125
141	National Draeger	4059276 thru 4059279 4054337 thru 40544340	5	FF	OPD,Es,SAR	25-300	85-120
143	MSA	474944 thru 474961	5	FF	OPD, Es	8-300	65-85
144	North	802,805 808, 811	60	FF	OPD,SAR	12.5-300	78-82

COMBINATION SCBA AND SAR (DEMAND AND PRESSURE DEMAND)

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life/SCBA (min)	Face-piece Type	Supplied Air Respirator Type	Hose Length feet	Pressure Range psi.
146	North	803, 806 809, 812 813, 814 815, 816	30	FF	OPD,SAR	12.5-300	78-82
147	North	801, 804 807, 810	30	FF	OPD,SAR	12.5-300	78-82
148	MSA	474204 thru 474211 474234 thru 474241	30	FF	ODM,SAR	15-300	85-90
149	MSA	475898 475899 475864 475865	15	FF	ODM,SAR	15-300	85-90
150	MSA	474188 474189 474192 474193 474218 474219 474222 474223 481245 481249	60	FF	ODM,SAR	15-300	85-90
151	MSA	474187 474191 474217 474221 481244 481248	30	FF	ODM,SAR	15-300	85-90

COMBINATION SCBA AND SAR (DEMAND AND PRESSURE DEMAND)

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life/SCBA (min)	Face-piece Type	Supplied Air Respirator Type	Hose Length feet	Pressure Range psi.
152	MSA	475956 475957 475960 475961 475975 475976 475979 475980	60	FF	ODM,SAR	15-300	85-90
153	MSA	475995 475974 475978 475959	30	FF	ODM,SAR	15-300	85-90
154	MSA	474212 thru 474215 474242 thru 474245 475822 thru 475825 475884 thru 475887 481224 thru 481227 481234 thru 481237	30	FF	OPD,SAR	15-300	85-90
155	MSA	475900 475901 475866 475867 481228 481238	15	FF	OPD,SAR	15-300	85-90
156	MSA	474196 thru 474203 474226 thru 474233	30	FF	ODM,SAR	15-300	85-90
157	MSA	475896 475897 475862 475863	15	FF	ODM,SAR	15-300	85-90

COMBINATION SCBA AND SAR (DEMAND AND PRESSURE DEMAND)

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life/SCBA (min)	Face-piece Type	Supplied Air Respirator Type	Hose Length feet	Pressure Range psi.
158	MSA	475810 475811 475814 475815 475816 475817 475820 475821 481247 481251	60	FF	ODM,SAR	15-300	85-90
159	MSA	474195 474225 475813 475819 481246 481250	30	FF	ODM,SAR	15-300	85-90
160	MSA	475964 475965 475968 475969 475983 475984 475987 475988	60	FF	ODM,SAR	15-300	85-90
161	MSA	475963 475967 475982 475986	30	FF	ODM,SAR	15-300	85-90
162	MSA	475888 thru 475895 475826 thru 475833 481229 thru 481232 481239 thru 481242	30	FF	ODM,SAR	15-300	85-90
163	MSA	475902 475903 475868 475869 481233 481243	15	FF	OPD,SAR	15-300	95-90

COMBINATION SCBA AND SAR (DEMAND AND PRESSURE DEMAND)

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life/SCBA (min)	Face-piece Type	Supplied Air Respirator Type	Hose Length feet	Pressure Range psi.
165	ISI	707.127.00 707.127.01/.02/.03/.04	5	FF	ODM,Es,SAR	25-300	80-100
183	Dual Safe	DS-100-1	3	FF	OPD,Es,SAR	50-250	50-120
184	Dual Safe	DS-100-2	3	FF	OPD,Es,SAR	50-250	50-120
187	Scott	900155-01 900155-02	5	FF	OPD,Es,SAR	to 300	70-125
188	North	85500	5	FF	OPD,Es,SAR	12.5-300	78-80
189	O-Two Systems	7010400-1 7010400-2/3/4	5	FF	OPD,Es,SAR	25-300	100-125
190	ISI	707.137.00 707.137.01	30	FF	OPD,SAR	25-300	80-120
191	ISI	707.137.02 707.137.04	30	FF	OPD,SAR	25-300	80-120
192	ISI	707.137.03	60	FF	OPD,SAR	25-300	80-120
194	PMI	SAS100	5	HH	OPD,Es,SAR	to 300	70-80
196	National Draeger	4050602 thru 4050605 4050645 thru 4050647 4050651 thru 4050657 4054269 thru 4054274	5	FF	OPD,Es,SAR	25-300	85-120
197	Interspiro	607-301-222 607-311-222 607-301-322 607-311-322 607-321-322	60	FF	OPD,SAR	25-300	60-125

COMBINATION SCBA AND SAR (DEMAND AND PRESSURE DEMAND)

Approval Number TC-13F-	Approval Issued to	Model Number(s)	Service Life/SCBA (min)	Face-piece Type	Supplied Air Respirator Type	Hose Length feet	Pressure Range psi.
211	Respiratory Systems	L-1500	15	FF	OPD, SAR	6	65-85
						25	65-85
						50	65-85
						75	70-85
						100	70-85
						150	70-85
						200	75-85
						250	75-85
213	Interspiro	607-311-323 607-321-323	45	FF	OPD,SAR	25-300	60-125
214	SAMS	SAMS-1	3	HH	OPD, Es,SAR	100-300	120-125
215	MSA	485532 485533 485534 485535 485525 485526 485527 485528	5	FF	OPD, SAR	25-300	65-85
218	Respiratory Systems	500	5	FF	OPD, SAR	6	65-85
						25	65-85
						50	65-85
						75	70-85
						100	70-85
						150	70-85
						200	75-85
						250	75-85
219	Respiratory Systems	1000	10	FF	OPD, SAR		
						25	65-85
						50	65-85
						75	70-85
						100	70-85
						150	70-85
						200	75-85
						250	75-85

GAS MASKS (14G)

B. Gas Masks

1. Ammonia

Approval

Approved for respiratory protection against ammonia.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types.

Follow the manufacturer's instructions for changing canisters.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

GAS MASKS - AMMONIA

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
88	MSA	448979 448980 448981 448982	Fm	FF	D,M	
93	Willson	2164F 2264F	Fm	FF	D,F,M	MA
96	MSA	465331 465327 471839 471840	Bm	FF	H,A	OV/CO/AG
101	MSA	448926 448927 448928 448929 448930 448931 448936 448937 448938 448939	Bm	FF	D,M	
103	Scott	6030-1104* 6030-1204* 6030-2104* 6030-2204* 6030-3104* 6030-3204* 6030-4104* 6030-4204* 6030-5104* 6030-5204* 63-AM 63F-AM 63FG-AM 63R-AM 63S-AM 63XL-AM	Fm, Es	FF	D,M	MA
111	North	7604L* 7604LS* 7604LN* 7604SLN*	Fm	FF		

GAS MASKS - AMMONIA

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
112	MSA	469039 469040	Fm, Es	FF	D,F,M	OV/Cl
121	Pirelli	4333.2012	Fm, Es	FF		
126	MSA	472884 472885	Fm, Es Combination Type C, CF 35-40 psig; 25-300 ft hose	FF	D,M	
128	Pirelli	4333.2015	Fm, Es	FF	H	
132	Racal	BE 3/K BE 7/K	PAPR	FF		MA
137	MSA	478120 478121 480949 480955 480961 480967 480973 480979 480985 480991 480997 481003 481009 481015 481021 481027 481033 481039	SAR Combination Type CE, CF 35-40 psig, 8-300 ft hose	FF		
140	Scott	63-OAAM 63R-OAAM 63S-OAAM 63F-OAAM 63FG-OAAM 63XL-OAAM	Rp,Fm	FF	D,M	OV/Cl/HCl MA/H2S

GAS MASKS - AMMONIA

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
144	Willson	6664F S6664F 6764F S6764F	Es,Fm	FF	DFM	MA
148	MSA	483875	Rp,Bm	FF	DM	OV, Cl
				Combination Type C, CF Hose Length feet: 8-300 Air Press. psig: 35-40		
151	MSA	484425	Bm	FF	DM	
				Combination Type C, Pd Hose Length feet: 8-300 Air Press. psig: 65-85		
157	MSA	484430	Bm	FF	DM	OV/Cl
				Combination Type C, Pd Hose Length feet: 8-300 Air Press. psig: 65-85		

2. Chlorine

Approval

Approved for respiratory protection against chlorine.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and page 9 for gas and vapor.

Follow the manufacturer's instructions for changing canisters.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

GAS MASKS - CHLORINE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
89	MSA	460131 460132 460133 460134	Fm	FF	D,M	
95	Willson	2162F 2262F	Fm	FF	D,F,M	
98	MSA	460125 460126 460127 460128 460129 460130	Bm	FF	D,M	OV/H2S/PH3
102	Scott	6030-1108* 6030-1208* 6030-2208* 6030-2108* 6030-3108* 6030-3208* 6030-4108* 6030-4208* 6030-5108* 6030-5208*	Fm, Es	FF	D,M	
105	MSA	466225* 466226*	Fm, Es	FF	H,A	
106	MSA	466231 466232	Fm, Es	FF	H	
112	MSA	469039 469040	Fm, Es	FF	D,F,M	OV/NH3
113	MSA	468921	SAR (combination Type C, CF 35-40 psig; 25-300 ft. hose)	ON	H,A	

GAS MASKS - CHLORINE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
114	MSA	468922	SAR (combination type C, CF 35-40 psig; 25-300 ft. hose)	ON	H,A	
118	Scott	6030-1175* 6030-1275* 6030-2175*/6030-2275* 6030-3175*/6030-3275* 6030-4175*/6030-4275* 6030-5175*/6030-5275* 63-TEDA-H 63F-TEDA-H 63FG-TEDA-H 63R-TEDA-H 63S-TEDA-H 63XL-TEDA-H	Fm, Es	FF	H	
123	Racal	BE 3/B BE 7/B	PAPR, FF	FF		HCl
129	Scott	63-OA 63F-OA 63FG-OA 63R-OA 63S-OA 63XL-OA	Fm, Es	FF	D,M	HCl/OV/H2S SO2/CH2-O
130	Scott	63-Cl 63F-Cl 63FG-Cl 63R-Cl 63S-Cl 63XL-Cl	Fm, Es	FF	D,M	HCl/H2S CH2-O
131	Scott	63Cl-H 63F-Cl-H 63FG-Cl-H 63R-Cl-H 63S-Cl-H 63XL-Cl-H	Fm, Es	FF	H,R,A	HCl/H2S CH2-O

GAS MASKS - CHLORINE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
140	Scott	63-OAAM 63R-OAAM 63S-OAAM 63F-OAAM 63FG-OAAM 63XL-OAAM	Rp,Fm	FF	D,M	OV/MA/HCl NH3/H2S
143	Willson	6662F S6662F 6762F S6762F	Es,Fm	FF	DFM	
147	MSA	483874	Rp,Bm	FF	DM	
				Combination Type C, CF Hose Length feet: 8-300 Air Press. psig: 35-40		
148	MSA	483875	Rp,Bm	FF	DM	OV, NH3
				Combination Type C, CF Hose Length feet: 8-300 Air Press. psig: 35-40		
153	MSA	484429	Bm	FF	DM	
				Combination Type C, Pd Hose Length feet: 8-300 Air Press. psig: 65-85		
157	MSA	484430	Bm	FF	DM	OV/NH3
				Combination Type C, Pd Hose Length feet: 8-300 Air Press. psig: 65-85		

3. Sulfur Dioxide

Approval

Approved for respiratory protection against sulfur dioxide.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types.

Follow the manufacturer's instructions for changing canisters.

Do not use in concentrations which generate high heats of reaction with sorbent material.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

GAS MASKS - SULFUR DIOXIDE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
92	MSA	461133 461134 461140 461141	Fm	FF	D,M	
129	Scott	63-OA 63F-OA 63FG-OA 63R-OA 63S-OA 63XL-OA	Fm, Es	FF	D,M	Cl/HCl/OV H2S/CH2-O

4. Acid Gases

Approval

Approved for respiratory protection against acid gases.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types.

Follow the manufacturer's instructions for changing canisters.

Do not use in concentrations which generate high heats of reaction with sorbent material.

Not for use against gases and vapors with poor warning properties.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

GAS MASKS - ACID GAS

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
96	MSA	465331 465327 471839 471840	Bm	FF	H,A	OV/CO/AG
100	MSA	460119 460120 460121 460122 460123 460124	Bm	FF	D,M	OV
107	MSA	466227 466351 466228 466350	Fm, Es	FF	D,M	OV/CH2-O
127	Willson	2165, 2265	Fm, Es	FF	D,M	OV
133	Racal	BE 3/E BE 7/E	PAPR, FF	FF		
145	Willson	6665 S6665 6765 S6765	Es,Fm	FF	DM	OV
149	MSA	483873	Rp,Bm	FF	DM	OV, CH2-O
				Combination Type C, CF Hose Length feet: 8-300 Air Press. psig: 35-40		
155	MSA	484428	Bm	FF	DM	OV/CH2-O
				Combination Type C, Pd Hose Length feet: 8-300 Air Press. psig: 65-85		

5. Organic Vapors

Approved for respiratory protection against organic vapors.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types.

Follow the manufacturer's instructions for changing canisters.

Do not wear for protection against gases or vapors with poor warning properties or those which generate high heats of reaction with sorbent materials in the canister.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

GAS MASKS - ORGANIC VAPOR

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
86	MSA	448983 thru 448986	Fm	FF	H,A	Pest
87	MSA	448975 thru 448978	Fm	FF	D,M	
96	MSA	465331 465327 471839 471840	Bm	FF	H,A	NH3/CO/AG
97	MSA	448932 thru 448935 448920 thru 448925	Bm	FF	D,M	
98	MSA	460125 thru 460130	Bm	FF	D,M	Cl/H2S/PH3
99	MSA	448940 thru 448943	Bm	FF	H	Pest
100	MSA	460119 thru 460124	Bm	FF	D,M	AG

GAS MASKS - ORGANIC VAPOR

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
104	Scott	6030-1113* 6030-1213* 6030-2113* 6030-2213* 6030-3113* 6030-3213* 6030-4113* 6030-4213* 6030-5113* 6030-5213* 63-OV 63F-OV 63FG-OV 63R-OV 63S-OV 63XL-OV	Fm, Es	FF	D,M	
107	MSA	466227 466351 466228 466350	Fm, Es	FF	D,M	AG CH2-O
108	MSA	466229 466230	Fm, Es	FF	H,A	
110	North	7601L* 7601LN* 7601LS* 7601LSN*	Fm	FF		
112	MSA	469039 469040	Fm, Es	FF	D,F,M	NH3/Cl
115	MSA	469268 469269	Fm (combination Type C, CF 35-40 psig; 8-300 ft. hose)	FF	H,A	
116	MSA	469270	Fm, Es (combination Type C, CF 35-40 psig; 8-300 ft. hose)	ON	H,A	

GAS MASKS - ORGANIC VAPOR

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
117	Scott	6030-1157* 6030-1257* 6030-2157* 6030-2257* 6030-3157* 6030-3257* 6030-4157* 6030-4257* 6030-5157* 6030-5257* 63-OV-H 63FG-OV-H 63F-OV-H 63R-OV-H 63S-OV-H 63XL-OV-H	Fm, Es	FF	H	Pest
119	Pirelli	4333.2011	Fm, Es	FF		
120	Pirelli	4333.2014	Fm, Es	FF	H	
122	Racal	BE 3/A BE 7/A	PAPR, FF	FF		
124	MSA	472886 472887	SAR Combination Type C, CF 35-40 psig and hose length 8-300 feet	FF	H,A	Pest
125	MSA	472882 472883	SAR Combination Type C, CF 35-40 psig; hose length 8-300 feet	FF	D,M	AG
127	Willson	2165 2265	Fm, Es	FF	D,M	AG

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
129	Scott	63-OA 63F-OA 63FG-OA 63R-OA 63S-OA 63XL-OA	Fm, Es	FF	D,M	HCl/Cl/ H2S/SO2/ CH2-O
136	MSA	478118 478119 480948 480954 480960 480966 480972 480978 480984 480990 480996 481002 481008 481014 481020 481026 481032 481038	SAR	FF D,M Combination Type CE, CF 8-300 ft hose, 35-40 psig		
138	MSA	478122 478123 480950 480956 480960 480962 480968 480998 481004 481022 481028 480974 480980 480986 480992 481010 481016 481034 481040	SAR	FF H,A Pest Combination Type CE, CF 8-300 ft hose, 35-40 psig		

GAS MASKS - ORGANIC VAPOR

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
139	MSA	478124 478125 480951 480957 480963 480969 480993 481011 481023 481029 481041 480975 480981 480987 480999 481017 481005 481035	SAR Combination type CE, CF 35-40 psig, 8-300 ft hose	FF	H,A	
140	Scott	63-OAAM 63R-OAAM 63S-OAAM 63F-OAAM 63FG-OAAM 63XL-OAAM	Rp,Fm	FF	D,M	MA/Cl/HCl NH3/H2S
141	National Draeger	4052215 4052216	Es,Rp,Fm	FF	H	
142	Willson	6661F S6661F 6761F S6761F	Es,Fm	FF	DFM	Pest
145	Willson	6665 S6665 6765 S6765	Es,Fm	FF	DM	AG

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
148	MSA	483875	Rp,Bm	FF	DM	Cl, NH3
				Combination Type C, CF Hose Length feet: 8-300 Air Press. psig: 35-40		
149	MSA	483873	Rp,Bm	FF	DM	AG, CH2-0
				Combination Type C, CF Hose Length feet: 8-300 Air Press. psig: 35-40		
150	MSA	484424	Bm	FF	DM	
				Combination Type C, Pd Hose Length feet: 8-300 Air Press. psig: 65-85		
152	MSA	484426	Bm	FF	HA	Pest
				Combination Type C, Pd Hose Length feet: 8-300 Air Press. psig: 65-85		
154	MSA	484427	Bm	FF	HA	
				Combination Type C, Pd Hose Length feet: 8-300 Air Press. psig: 65-85		
155	MSA	484428	Bm	FF	DM	AG/CH2-0
				Combination Type C, Pd Hose Length feet: 8-300 Air Press. psig: 65-85		

GAS MASKS - ORGANIC VAPOR

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
157	MSA	484430	Bm	FF	DM	Cl/NH3
				Combination Type C, Pd Hose Length feet 8-300	Air Press. psig 65-85	

6. Carbon Monoxide

Approval

Approved for respiratory protection against carbon monoxide.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types.

Follow the manufacturer's instructions for changing canisters.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

GAS MASKS - CARBON MONOXIDE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
82	MSA	455299 (W65)	Es	M		
83	Drager	FSR810 FSR910	Es	M		
96	MSA	465331 465327 471839 471840	Bm	FF	H,A	NH3/OV/AG

7. Pesticides

Approval

Approved for respiratory protection against pesticides.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types.

Follow the manufacturer's instructions for changing canisters.

Do not wear for protection against gases or vapors with poor warning properties or those which generate high heats of reaction with sorbent materials in the canister.

Not approved for fumigants.

Refer to pesticide label for limitations on respirator use.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
86	MSA	448983 thru 448986	Fm	FF	H,A	OV
94	Willson	2161F 2261F	Fm	FF	D,F,M	OV
99	MSA	448940 thru 448943	Bm	FF	H	OV
117	Scott	6030-1157* 6030-1257* 6030-2157*/6030-2257* 6030-3157*/6030-3257* 6030-4157*/6030-4257* 6030-5157*/6030-5257* 63-OV-H 63F-OV-H 63FG-OV-H 63R-OV-H 63S-OV-H 63XL-OV-H	Fm, Es	FF	H	OV
124	MSA	472886	SAR	FF Combination Hose Length feet: 8-300 Type C, CF Air Press. psig: 35-40	H,A	OV
138	MSA	478122 480950 480956 480962 480968 480974 480980 480986 480992 480998 481004 481010 481016	SAR	FF Combination Hose Length feet: 8-300 Type C, CF Air Press. psig: 35-40	H,A	OV

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
138 Cont.		481022 481028 481034 481040				
142	Willson	6661F S6661F 6761F S6761F	Es,Fm	FF	DFM	OV
152	MSA	484426	Bm	FF Combination Type C, Pd Hose Length feet: 8-300 Air Press. psig: 65-85	HA	OV

8. Other gases and vapors

Approval

See approval labels for approved maximum use concentration and for specific limitations.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types.

Follow the manufacturer's instructions for changing canisters.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

GAS MASKS - OTHER GASES AND VAPORS - VINYL CHLORIDE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
84	MSA	461481 thru 461486	Bm	FF		
85	Scott	601211-17* 601221-17* 601111-17* 601121-17* 601511-17* 601521-17*	Bm	FF		
91	North	7820* 7820S* 7820N* 7820SN* 7829* 7829S* 7829N* 7829SN*	Bm	FF		

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
98	MSA	460125 460126 460127 460128 460129 460130	Bm	FF	D,M	OV/H2S/Cl

GAS MASKS - OTHER GASES AND VAPORS - HYDROGEN SULFIDE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
98	MSA	460125 460126 460127 460128 460129 460130	Bm	FF	D,M	OV/PH3/Cl
129	Scott	63-OA 63F-OA 63FG-OA 63R-OA 63S-OA 63XL-OA	Fm, Es	FF	D,M	HCl/OV/Cl/ SO2/CH2-O
130	Scott	63-Cl 63F-Cl 63FG-Cl 63R-Cl 63S-Cl 63XL-Cl	Fm, Es	FF	D,M	Cl/HCl CH2-O
131	Scott	63Cl-H 63F-Cl-H 63FG-Cl-H 63R-Cl-H 63S-Cl-H 63XL-Cl-H	Fm, Es	FF	H,R,A	Cl/HCl CH2-O
140	Scott	63-OAAM 63R-OAAM 63S-OAAM 63F-OAAM 63FG-OAAM 63XL-OAAM	Rp,Fm	FF	D,M	OV/Cl/HCl NH3/MA

GAS MASKS - OTHER GASES AND VAPORS - HYDROGEN CHLORIDE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
123	Racal	BE 3/B BE 7/B	PAPR	FF		Cl
129	Scott	63-OA 63F-OA 63FG-OA 63R-OA 63S-OA 63XL-OA	Fm, Es	FF	D,M	H2S/OV/Cl/ SO2/CH2-O
130	Scott	63-Cl 63F-Cl 63FG-Cl 63R-Cl 63S-Cl 63XL-Cl	Fm, Es	FF	D,M	Cl/H2S CH2-O
131	Scott	63Cl-H 63F-Cl-H 63FG-Cl-H 63R-Cl-H 63S-Cl-H 63XL-Cl-H	Fm, Es	FF	H,R,A	Cl/H2S CH2-O
140	Scott	63-OAAM 63R-OAAM 63S-OAAM 63F-OAAM 63FG-OAAM 63XL-OAAM	Rp,Fm	FF	D,M	OV/Cl/NH3 MA/H2S

GAS MASKS - OTHER GASES AND VAPORS - ETHYLENE OXIDE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
134	MSA	474143 474144	FM	FF	D,M	

GAS MASKS - OTHER GASES AND VAPORS - HYDROGEN FLUORIDE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
135	MSA	476451 476453	Fm, Es	FF	H,A	
146	MSA	483876	Rp,Bm	FF	HA	
				Combination Type C, CF Hose Length feet: 8-300 Air Press. psig: 35-40		
156	MSA	484431	Bm	FF	HA	
				Combination Type C, Pd Hose Length feet: 8-300 Air Press. psig: 65-85		

GAS MASKS - OTHER GASES AND VAPORS - FORMALDEHYDE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
107	MSA	466227 466351 466228 466350	Fm, Es	FF	D,M	OV/AG
129	Scott	63-OA 63F-OA 63FG-OA 63R-OA 63S-OA 63XL-OA	Fm, Es	FF	D,M	H2S,HCl Cl,SO2,OV
130	Scott	63-Cl 63F-Cl 63FG-Cl 63R-Cl 63S-Cl 63XL-Cl	Fm, Es	FF	D,M	H2S,HCl Cl
131	Scott	63-Cl-H 63F-Cl-H 63FG-Cl-H 63R-Cl-H 63S-Cl-H 63XL-Cl-H	Fm, Es	FF	H,R,A	H2S,HCl Cl
149	MSA	483873	Rp,Bm	FF	DM	OV, AG
				Combination Type C, CF Hose Length feet: 8-300 Air Press. psig: 35-40		
155	MSA	484428	Bm	FF	DM	AG/OV
				Combination Type C, Pd Hose Length feet: 8-300 Air Press. psig: 65-85		

GAS MASKS - OTHER GASES AND VAPORS - METHYLAMINE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
93	Willson	2164F	Es,Fm	FF	DFM	NH3
103	Scott	63-AM 63F-AM 63FG-AM 63R-AM 63S-AM 63XL-AM	Es,Fm	FF	DM	NH3
132	Racal	BE 3/K BE 7/K	PAPR	FF		NH3
140	Scott	63-OAAM 63R-OAAM 63S-OAAM 63F-OAAM 63FG-OAAM 63XL-OAAM	Rp,Fm	FF	D,M	OV/Cl/HCl NH3/H2S
144	Willson	6664F S6664F 6764F S6764F	Es,Fm	FF	DFM	NH3

SUPPLIED AIR RESPIRATORS (19C)

C. Supplied Air Respirators

1. Type C Continuous Flow

Approval

Approved for respiratory protection against atmospheres not immediately dangerous to life or health. Respirator only approved when used with respirable air.

Limitations

Not for use in atmospheres containing less than 19.5 percent oxygen.

Use only the hose lengths and pressure ranges specified on the approval label.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

SUPPLIED AIR RESPIRATORS - TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
64	Cesco	PI-800-AA PI-800-/DA/NA/AAHF	Bm	HH	15-50 75-100	6-17 7-20
64	US Safety	PI-800-AA PI-800-DA/-NA/-AAHF	Bm	HH	15-50 75-100	6-17 7-20
64	Wheeler Protective Apparel	17032 17032A 17036 17036H	Bm	HH	15-50 75-100	6-17 7-20
65	Survivair	9011-12 9811-12	Fm	FF	4-250	50-125
66	Survivair	9011-14 9811-14	Fm	FF	4-250	50-125
67	Survivair	9011-13 9811-13/16	Fm	FF	4-250	50-125
68	Survivair	9011-15 9811-15/17	Fm	FF	4-250	50-125
69	3M	W-280-100/50/25 W-283-100/50/25* W-286-100/50/25 W-292-100/50/25 W-308-100/50/25 W-313-100/50/25 W-314-100/50/25 W-318-100/50/25 W-321-100*S/M/L W-321-25*S/M/L W-321-50*S/M/L W-329-100/50/25 W-332-100/50/25 W-335-100/50/25 W-338-100/50/25 W-346-100/50/25 W-352-100/50/25	Bm	HH	25 & 50 100 200 300	25-35 30-45 35-60 40-75

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
69-Cont.		W-368-25/50/100				
		W390				
		W394				
		W398				
		W-371-25/50/100				
		W-810-100/50/25				
		W-840-100/50/25				
		W-856-100L/M/S*				
		W-856-25L/M/S				
		W-856-50L/M/S				
		W-858-100/50/25				
		W-870-100/50/25				
69	Pauli	W-858-100/50/25				
	& Griffin*	"				
	Clemco*	"				
	Bowen Tools*	"				
	Empire Abrasive*	"				
	Kelco Sales*	"				
	Pangborn*	"				
70	3M		Bm	HH	25-100	60-80
		W-281-100/50/25				
		W-284-100/50/25*				
		W-287-100/50/25				
		W-293-100/50/25*				
		W-310-100/50/25				
		W-311-100/50/25				
		W-315-100/50/25				
		W-317-100/50/25				
		W-322-100/50/25L				
		W-322-100/50/25M				
		W-322-100S*/50S*/25S*				
		W-328-100/50/25				
		W-330-100/50/25				
		W-333-100/50/25				
		W-336-100/50/25				
		W-347-25/50/100				
		W-354-25/100/50				
		W-369-25/50/100				
		W-370-25/50/100				
		W-372-25/50/100				
		W-820-100/50/25				
		W-880-100/50/25				
		W-881-100/50/25L/M				
		W-881-100/50/25S*				
		W-888-100/50/25*				
		W-890-100/50/25				

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
70 Cont						
		W389				
		W393				
		W397				
	Pauli	W-888-100/50/25				
	& Griffin	"				
	Clemco	"				
	Bowen Tools	"				
	Empire Abrasive	"				
	Kelco Sales	"				
	Pangborn	"				
71	Scott	4616-11/12/15	Bm	FF	15-50	12-25
		4616-21/22/25			50-250	25-40
		4622-11/12/15/21/22/25				
72	Scott		Bm	FF	15-50	6-16
		4616-18/19/28/29				
		4622-18/19/28/29			50-250	16-22
73	Scott	802230 series	Fm	FF	3-250	60-125
78	MSA	460862 thru 460865	Bm	ON,FF	8-300	35-40
		461708				
		461717 thru 461719				
		469716, 469717				
		469720, 469721				
		475146 thru 475149				
		480464 thru 480467				
		480600				
		480629 thru 480636				
		480671, 480672				
		480481				
		480483				
		480663, 480664				
		480667, 480668				

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
80	MSA	460903 460904 460905 460906 461709 461710 461711 461712 480601 480602 480673 thru 480676	Bm	HH	8-300	55-60
81	MSA	460907 460908 460909 460910 461713 461714 461715 461716	Bm	HH	8-300	55-60
82	Pulmosan	AL180-10168	Bm	FF	15-50	6-8
83	Willson	1810-A/B/C/D/E 1810* 1820* 1820-A/B/C/D/E	Bm	ON	15-100 100-300	10-32 21-50
84	Bullard	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Anderson	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Bowen	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
84	Quaker State	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Pauli and Griffin	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Empire	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Kelco	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Marthens	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Ace	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Clemtex	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	A-BEC	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Schmidt	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Matfer	77 46	Bm	HH	25-200 25-300 100 only	80-95 80-95 8-15

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
84	Air Components	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Porter Warner	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Clark Sand	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Sulliblast	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Key Houston	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
85	Clemco	46(PCE)	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
86	AO	R6099 R5099 S5099 S6099	Bm	ON	12.5-75 100-175 200-300	7-15 13-25 18-35
87	3M	W-270-100/50/25 W-271-100/50/25 W-272-100/50/25 W-274-100/50/25L/M/ W-274-100/50/25S* W-277-S/M/L* W-282-100/50/25 W-285-100/50/25* W-288-100/50/25 W-294-100/50/25* W-309-100/50/25 W-312-100/50/25 W-319-100/50/25	Bm	HH	25-100	60-70

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
87 Cont.		W-320-100/50/25M/L W-320-100/50/25S* W-323-100/50/25 W-327-100/50/25 W-331-100/50/25 W-334-100/50/25 W-337-25/50/100 W-348-25/50/100 W-353-25/50/100 W-373-25/50/100 W388 W392 W396				
87	Pangborn* Pauli&Griffin* Bowen Tools* Clemco* Empire Abrasive* Kelco*	W-271-100/50/25 " " " " "				
88	Binks	40-160 40-200/220/240/260/280/300/320 40-571/573/575/577/579/581/583/585	Bm	ON	8-300	35-40
89	AO	R56001	Bm	HH	12.5-25 50-100 125-200 225-300	10-20 18-32 25-40 35-60
92	Globe	2185-6 2185-4	Fm	FF	25-200	60-70
94	Willson	1850* 1860* 1850A/B/C/D/E 1860A/B/C/D/E	Bm	FF	15-100 100-300	11-32 21-50
95	Pulmosan	10159 10237 11033 AL330*	Bm	ON	15-50	6-9

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
96	Cesco	801-AA/DA/NA/AAHF	Bm	HH	15-100	60-100
96	US Safety	801-AA/DA/NA/AAHF	Bm	HH	15-100	60-100
96	Wheeler Protective Apparel	17232 17232H 17236 17236H	Bm	HH	15-100	60-100
97	Scott	802280-01 802280-02/05/06/09/10/13/14	Fm	ON	3-250	60-125
102	Bullard	999-3 999-4 999-5 999-6 999-7 999-8	Bm	HH	25-100 25-100 100 only	12-25 80-100 8-15
102	Anderson	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Bowen	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Pauli & Griffin	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
102	Empire	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Deane	999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Kelco	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Titan	999-3 999-4 999-5 999-6 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	A-BEC	999-3 999-4 999-5 999-6	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Schmidt	999-3 999-4 999-5 999-6	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Key Houston	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
102	Clemco	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Binks	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Air Components	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Ace	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Clemtex	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Sulliblast	999-3 999-4 999-5 999-6	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
103	MSA	463925 463926 463970 463973 463974 463983 463986	Bm	HH	8-300	55-60

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
103 Cont.		463987				
		480495				
		480497				
		480499				
		480714				
		480716				
		480718				
		480489				
		480491				
		480701				
		480703				
		480705				
		480707				
104	MSA	463971	Bm	HH	8-50	16-20
		463972				
		463975				
		463976				
		463984				
		463985				
		463988				
		463989				
		480496				
		480498				
		480713				
		480715				
		480717				
		480719				
		480490				
		480492				
		480702				
		480704				
		480706				
		480708				
109	North	85100 series	Bm	ON	3/8 inch I.D.	
		85101* thru			12.5-25	8- 9
		85126*			50-75	10-11
					100-150	12-13
					175-300	17-18
					1/2 inch I.D.	
					12.5 - 25	5-15
					50 - 100	6-17
					125-200	8-22
					225-300	9-28

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
					3/8 inch I.D.	
110	North	85200 series	Bm	FF	12.5	8-9
		85201* thru			25-75	10-11
		85225*			75-150	12-13
					175-300	17-18
					1/2 inch I.D.	
					12.5 - 25	5-15
					50 - 100	6-17
					125-200	8-22
					225-300	9-28
111	AO	50733	Bm	FF	25	8-11
		50734			50-75	11-15
					100-125	14-18
					150-200	18-23
					225-300	21-28
112	Glendale	GR5000	Bm	ON,FF	25-300	30-35
		GR6000*				
		GR6000S				
		GR6000N				
113	MSA	463277	Bm	FF	8-50	10-15
		463281				
		463297				
		463298				
		463299				
		463300				
		463301				
		463302				
		469718				
		469719				
		469722				
		469723				
		475148				
		475149				
		480472 thru 480475				
		480482				
		480484				
		480637 thru 480646				
		480665				
		480666				
		480669				
		480670				

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
114	Binks	40-140 40-210/230/250/270/290/310/330 40-572/574/576/578/580/582/584/586	Bm	FF	8-50	10-15
115	MSA	463293 463294 463305 thru 463310 480650 480655 thru 480660 480470 480477, 480478, 480479	Bm	HH	8-50	16-20
118	MSA	463927 463928 463977 463978	Bm	HH	8-300	75-100
120	Defense Apparel-Nucon Products	HSQ-10	Bm	HH	50-100 100	25-35 35-50
121	US Safety	152	Bm	ON	25-300	35-40
122	Cesco	97	Bm	ON	25-300	35-40
123	3M	W-298/25/50/100 W-378/25/50/100	Bm	ON	25 50 100	6-16 7-16 11-22
124	Safety and Supply	RC2095ST/SC/HA RC2095G-HA/SC/ST RC2095R-HA/SC/ST RC2095B-HA/SC/ST RC2095W-HA/SC/ST RC-2095GY-HA/SC/S	Bm	HH	25-50 50-100 75-150 100-200 125-250 150-250	18-29 23-36 28-42 32-47 35-51 37-57
124	Trusafe				25-300	38-66

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
125	DeVilbiss	MPH-532	Bm	ON	15-100 100-300	10-32 21-50
126	US Safety Service	153	Bm	FF	25-300* 25-50**	35-60 35-60
				*max 7 lengths w/152-25 & 152-50 hose **max 2 lengths of 16261 hose		
127	Cesco	98	Bm	FF	25-300* 25-50**	35-60 35-60
				*max 7 lengths w/152-25 & 152-50 hose **max 2 lengths of 16261 hose		
128	Standard Safety Equipment	SD-5890	Bm	HH	25 50 75 100	10-30 15-35 17-41 20-48
129	MSA	468697	Bm	FF	8-300	35-40
131	Bullard	1414	Bm	HH	10-100 10-100 100 only	15-25 63-67 8-15
132	Bullard	1515	Bm	HH	10-100 10-100 100 only	15-25 63-67 8-15
133	Racal	AH30	Bm	HH	25-300	55-70
134	Racal	AH31	Bm	HH	25-300	55-70
135	Racal	AH33	Bm	HH	25-100	25-100

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
136	Racal	AH32	Bm	HH	25-100	75-120
137	Racal	AC30	Bm	HH	25-300	55-70
138	Racal	AC32	Bm	HH	25-100	75-120
139	Racal	AC38	Bm	HH	25-100	70-115
140	NPO			HH	25-50	20-34*
		SAR 100NH-AY/BY/CY/C-1Y/DY			75-100	25-45
		SAR 100NH-AG/BG/CG/C-1G/DG			125-175	30-50
		SAR 100NH-AB/BB/CB/C-1B/DB			200-275	38-55
		SAR 100NH-AR/BR/CR/C-1R/DR				
		SAR 100NH-AC/BC/CC/C-1C/DC			*Max pressure 28 psig	
		SAR 101H-AY/BY/CY/C-1Y/DY			w/Hanson & Snap-Tite	
		SAR 101H-AG/BG/CG/C-1G/DG			fittings	
		SAR 101H-AB/BB/CB/C-1B/DB				
		SAR 101H-AR/BR/CR/C-1R/DR				
		SAR 101H-AC/BC/CC/C-1C/DC				
		SAR 102H-AY/BY/CY/C-1Y/DY				
		SAR 102H-AG/BG/CG/C-1G/DG				
		SAR 102H-AB/BB/CB/C-1B/DB				
		SAR 102H-AR/BR/CR/C-1R/DR				
		SAR 102H-AC/BC/CC/C-1C/DC				
		SAR 100NH-1AY/AG/AB/AR/AC				
		SAR 100NH-1C-1Y/C-1G/C-1B/C-1R/C-1C				
		SAR 100NH-1BY/BG/BB/BR/BC				
		SAR 100NH-1DY/DG/DB/DR/DC				
		SAR 100NH-1CY/CG/CB/CR/CC				
		SAR 100NH-2AY/AG/AB/AR/AC				
		SAR 100NH-2BY/2BG/2BB/2BR/2BC				
		SAR 100NH-2DY/DG/DB/DR/DC				
		SAR 100NH-2CY/CG/CB/CR/CC				
		SAR 100NH-2C-1Y/1G/1B/1R/1C				
		SAR 101H-1AY/AG/AB/AR/AC				
		SAR 101H-1DY/DG/DB/DR/DC				
		SAR 101H-1BY/BG/BB/BR/BC				
		SAR 101H-1CY/CG/CB/CR/CC				
		SAR 101H-1C-1Y/1G/1B/1R/1C				
		SAR 101H-2AY/AG/AB/AR/AC				
		SAR 101H-2DY/DG/DB/DR/DC				
		SAR 101H-2CY/CG/CB/CR/CC				

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
140 Cont.		SAR 101H-2BY/BG/BB/BR/BC SAR 101H-2C-1Y/1G/1B/1R/1C SAR 102H-1AY/AG/AB/AR/AC SAR 102H-1DY/DG/DB/DR/DC SAR 102H-1BY/BG/BB/BR/BC SAR 102H-1CY/CG/CB/CR/CC SAR 102H-1C-1Y/1G/1B/1R/1C SAR 102H-2AY/AG/AB/AR/AC SAR 102H-DY/DG/DB/DR/DC SAR 102H-2BV/BG/BB/BR/BC SAR 102H-2CY/CG/CB/CR/CC SAR 102H-2C-1Y/1G/1B/1R/1C				
141	Racal	AT-30	Bm	HH	25-300	55-70
142	Racal	AT-32	Bm	HH	25-100	80-120
143	Racal	AT-38	Bm	HH	25-100	70-115
144	Mohawk	1010 1020	Bm	HH	50-100	25-35
147	Racal	AH38	Bm	HH	25-100	70-115
150	MSA	451518 451519	Bm	HH	8-50 50-125 125-200 200-300	15±3 20±3 25±3 35±3
151	MSA	471514 471515	Bm	HH	8-50	16-20
152	MSA	471516 471517	Bm	HH	8-300	55-60
153	Racal	AH39	Bm	HH	25-100	70-115

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
154	Bullard	CC20	N/A	HH	10 only	8-17
					25-100	12-17
					125-200	20-35
					225-300	25-45
					100 only	5-13
					200 only	8-20
					300 only	11-22
154	DuPont	M-163			25-50	15-30
155	Bullard	FAM, FAM-B	N/A	HH	50 only	1.5-6.0
					100 only	2.5-8.0
					150 only	3.5-12.0
					200 only	4.5-14.0
					250 only	5.5-16.0
					300 only	7.0-20.0
155	DuPont	M-162	N/A	HH	50 only	1.5-6.0
					100 only	2.5-8.0
					150 only	3.5-12.0
					200 only	4.5-14.0
					250 only	5.5-16.0
					300 only	7.0-20.0
157*	3M		Bm	FF	25-50	15-45
		W-366-25*/50*/100*			75-100	17-50
					125-200	22-65
					225-300	25-75
159	MSA	474184	Bm	HH	8-300	55-60
160	Lancs		Bm	HH	25-100	18-34
		LI520Y-HA/SC/ST			50-200	25-40
		LI520B-HA,-SC,-ST			75-300	28-48
		LI520G-HA,-SC,-ST			100-300	29-53
		LI520R-HA,-SC,-ST			25-300	31-59
		LI520W-YHA,-BHA,-YSC,-YST-BSC,-BST			150-300	32-60

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face piece Type	Hose Length feet	Pressure Range psi
164	Survivair	9850-25	Bm	FF	25	30-60
		9850-40			50	35-70
					75	40-85
					100	45-95
					150	55-110
					200	65-125
					250	75-125
165	Survivair	9850-40*	Bm	FF	25	30-60
					50	35-70
					75	40-85
					100	45-95
					150	55-110
					200	65-125
					250	75-125
166	Willson	4000A/B/C/D/E	Bm	HH	25-300	8-40
168	Binks	40-360	Bm	FF	8-150	20-40
		40-370/380/390				
		40-567/568/569/570				
170	Bullard			FF	25-100	9-22
		M-30/31/32/33/35			125-200	14-40
		M30V/31V/32V/33V			225-300	22-50
					10-100	45-75
					125-300	50-90
171	National Draeger	4052017	Bm	FF	25-300	50-60
		4042025				
		4052034				
		4052037				
		4052040				
		4052043				
		4052044				
		4052045				
172	Survivair	9812-02	Bm	FF	25	30-60
		9812-22			50	35-70
		9812-32			75	40-85
		9812-42			100	45-95
					150	55-110
					250	65-125

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
173	Survivair	9813-02 9813-22	Bm	ON	25 50 75 100 150 250	30-60 35-70 40-85 45-95 55-110 65-125
176	MSA	476056 478327	Bm	HH	8-50	16-20
177	MSA	474054 478326	Bm	HH	8-300	55-60
179	Racal	FP30-7	Bm	FF	25-300	55-70
180	Racal	FP30-8	Bm	ON	25-300	55-70
181	Racal	FP32-7	Bm	FF	25-100	75-120
182	Racal	FP38-7	Bm	FF	25-100	70-115
183	Racal	FP32-8	Bm	ON	25-100	75-120
184	Racal	FP38-8	Bm	ON	25-100	70-115
185	Racal	VH30	Bm	HH	25-300	55-70
186	Racal	VH32	Bm	HH	25-100	75-120
187	Racal	VH38	Bm	HH	25-100	75-115

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
188	Trusafe	WEI-HA	Bm	HH	25-50	20-35
		WEI-SC			50-100	24-43
		WEI-ST			125-250	37-61
		WEI-SS			150-250	38-66
					100-200	34-56
					75-150	30-50
					25-300	
190	Trusafe	ACII-HA	Bm	HH	25-50	20-35
		ACII-SC			50-100	24-43
		ACII-ST			75-150	30-50
		ACII-SS			100-200	34-56
		WEII-HA			125-250	37-61
		WEII-SC			150-250	38-66
		WEII-ST			25-300	
		WEII-SS				
					Without Valve	
191	US Safety	804-DI	Bm	HH	25-50	15-30
		804-DN			75-125	25-45
					150-200	30-60
					225-300	40-70
					W/Control Valve	
					25-50	25-30
					75-125	30-40
					150-200	35-50
					225-300	40-60
192	U.S. Safety	805-DI	Bm	HH	25-300	85-100
		805-DN				
					W/O Valve	
193	U.S. Safety	802-SL	Bm	HH	25-50	15-30
		802-WL			75-125	25-45
		802-SN			150-200	30-60
		802-WN			225-300	40-70
					W/Control Valve	
					25-50	25-30
					75-125	30-40
					150-200	35-50
					225-300	40-60

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
196	North	85300	Bm	HH	12.5-25	4-12
					50-75	6-14
					100-150	7-16
					175-200	9-18
					225-250	11-20
					275-300	12-22
					12.5	6-15
					25	8-17
					50	9-19
					100	15-30
					150	20-35
					200	25-45
					250	28-50
197	U.S. Safety	803-SL	Bm	HH	25-300	85-100
		803-WL				
		803-SN				
		803-WN				
199	3M	W-366-25	Bm	FF	25-50	15-45
		W-366-50			75-100	17-50
		W-366-100			125-200	22-60
					225-300	25-75
200	Neoterik	NP1740-1 thru -15	Bm	HH	25-100 (NP1680)	12-14
		NP1750-1 thru -15			25-300 (NP1681)	25-30
		NP1760-1 thru -15			25-300 (NP1682)	65-75
201	Pulmosan	20330	Bm	HH	15-25	7-9
					50	9-12
					100	7-10
202	Bullard	M-40-35	Bm	FF	25-300	35-70
		M-40-30			50-150	6-25
		M-40-32			200-300	8-30
		M-40-33				
		M-40-31				
		M-40-30V				
		M-40-32V				
		M-40-31V				
		M-40-33V				

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
202	DuPont	M-188	Bm	FF	25-300	35-70
					50-150	6-25
					200-300	8-30
203	Safety Products	AF0306	Bm	HH	25 or 35	55-90
					3/8 inch I.D.	
204	North	85000	Bm	FF	12.5-50	5-15
					75-150	9-24
					175-300	15-35
					1/2 inch I.D.	
					12.5 - 50	3-18
					75 - 150	5-22
					175-300	8-27
206	AO	R7800	Bm	FF	25	8-29
		S7800	Bm	FF	50	11-35
					75	12-39
					100	12-39
					125	13-42
					150	14-46
					175	15-50
					200	16-53
					225	18-56
					250	19-60
					275	20-61
					300	21-62
207	US Safety	Series 97LP	Bm	ON	50	1.5-7
					100	2.5-11
					150	3.5-15
					200	4.5-18
					250	5.5-21
					300	6.5-24

SAR TYPE C CONTINUOUS FLOW

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi				
						R714A/	R714B/	R714C/	R714D	
208	Willson	6370-A(S)	Bm	ON	25	5-18	5-20	8-20	5-30	
		-B(S)			50	6-25	6-25	10-75	6-20	
		-C(S)			75	8-25	8-25	12-30	8-25	
		-D(S)			100	8-30	10-35	14-35	10-35	
		-E(S)			125	14-38	16-40	16-40	16-40	
		6370-A(M)			150	16-40	20-45	20-45	20-45	
		-B(M)			175	20-42	24-50	24-50	24-50	
		-C(M)			200	22-44	28-55	28-55	28-55	
		-D(M)			225	24-46	32-60	32-60	32-60	
		-E(M)			250	26-48	36-60	36-65	36-65	
		6370-A(L)			300	30-50	40-65	40-65	40-65	
						R814A/	R814B/	R814C/	R814D/	R814E
		-B(L)			50	4-15	4-30	6-30	4-30	2-11
		-C(L)			100	5-19	5-30	8-30	5-30	3-17
						R825A/	R825B/	R825C/	R825D/	R825E
		-D(L)			25	5-18	6-35	8-35	7-35	3-24
		-E(L)			50	5-35	6-40	8-42	7-42	5-30
						R714A/	R714B/	R714C/	R714D	
209	Willson	6470-AL-A thru E	Bm	FF	25	6-18	6-20	6-20	6-20	
					50	6-22	8-25	8-25	8-25	
		S6470-AL-A thru E			75	8-28	10-30	12-30	12-30	
		6570-AL-A thru E			100	10-30	10-35	14-35	14-35	
		S6570-AL-A thru E			125	16-38	18-40	18-40	18-40	
		6670AL-A thru E			150	18-40	22-45	22-45	22-45	
		S6670AL-A thru E			175	22-42	26-50	26-50	26-50	
		6770AL-A thru E			200	24-44	30-55	30-55	30-55	
		S6770AL-A thru E								
210	SATA	15628	Bm	ON	25 or 50	60-87				
211	SATA	54148	Bm	HH	25 or 50	60-87				
213	3M	W608	Bm	HH		Inches of Water Column Height				
					50	4-14				
					100	6-23				
					150	9-32				

C. Supplied Air Respirators

1. Type C Continuous Flow

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
214	3M	W-401	Bm	FF	25	7.5-15
					50	8-15
					100	10-15
215	3M	W-402	Bm	FF	25	5-15
					50	5-15
					100	6-15
216	Vortec	22800	Bm	HH	25-300	80-90
217	North	85110	Bm	FF	3/8" I.D.	
					12.5-50	5-15
					75-150	9-24
					175-300	15-35
					1/2" I.D.	
					12.5-50	4-18
					75-150	5-22
					175-300	8-27
218	Parmelee	804LP-DI	Bm	HH	0-50	5.5-13.0
					0-100	7.5-17.0
					0-150	9.5-20.0
					0-200	10.5-23.0
					0-250	12.5-25.0
					0-300	14.5-28.0
219	Parmelee	802LP-SL	Bm	HH	0-50	5.5-13.0
		802LP-WL			0-100	7.5-17.0
		802LP-SN			0-150	9.5-20.0
		802LP-WN			0-200	10.5-23.0
					0-250	12.5-25.0
					0-300	14.5-28.0
220	MSA	482716	Bm	HH	8-25	3.5-5
		482717			25-50	4.5-6
		482719			50-100	6-8
		482723			100-150	8-11
					150-200	9-15
					200-250	10-18
					250-300	12-20

C. Supplied Air Respirators

1. Type C Continuous Flow

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
221	Binks	40-908	Bm	HH	8-25	3.5-5
		40-909			25-50	4.5-6
		40-911			50-100	6-8
		40-915			100-150	8-11
					150-200	9-15
					200-250	10-18
					250-300	12-20
222	MSA	482823	Bm	HH	8-300	55-60
		482827				
		482903				
		482907				
223	Binks	40-617	Bm	HH	8-300	55-60
		40-621				
		40-697				
		40-701				
224	MSA	482999	BM	HH	8-25	10-11
		483000			33-50	13-14
		483003			50-75	15-17
		483004			75-100	19-21
		483011			100-150	23-25
		483012			150-200	28-31
		483027			200-250	32-36
		483028			250-300	36-40
225	Binks	40-793	BM	HH	8-25	10-11
		40-797			33-50	13-14
		40-805			50-75	15-17
		40-821			75-100	19-21
					100-150	23-25
					150-200	28-31
					200-250	32-36
					250-300	36-40

2. Type C Pressure Demand

Approval

Approved for respiratory protection against atmospheres not immediately dangerous to life or health. Respirator only approved when used with respirable air.

Limitations

Not for use in atmospheres containing less than 19.5 percent oxygen.

Use only the hose lengths and pressure ranges specified on the approval label.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

SAR TYPE C PRESSURE DEMAND

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
67	Survivair	9011-13 9811-13/16	Fm	FF	4-250	50-125
68	Survivair	9011-15 9811-15/17	Fm	FF	4-250	50-125
74	Scott	801548 Series* 801548-02/-03/-06/-07	Fm	FF	3-250	60-125
90	ISD	900-002-264-01/02/03/04/11/12/13/14	Fm	ON,FF	25-250	50-125
93	MSA	89104 461669 461699 461700	Bm	FF	8-300	80-100
98	Scott	802280-03 802280-04/07/08/11/12/15/16	Fm	ON	3-250	60-125
145	Willson	1915* 1915A/B/C/D	Bm	ON	25-250	50-125
146	Willson	1950* 1960* 1950/A/B/C/D 1960/A/B/C/D	Bm	FF	25-250	50-125
149	National Draeger	4059081 thru 4059107 4059104 thru 4509111	Fm	FF	25-300	85-120
156	Interspiro	336-890-034 336-890-043	Bm	FF	25-200	60-125

SAR TYPE C PRESSURE DEMAND

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
158	MSA	473998 473457 473464 474020 475209 thru 475224 478721 thru 478728	Bm	HH	8-300	55-85
167	Globe	2939-1 2939-2/3/4	Bm	FF	25-200	60-75
169	Binks	40-525 40-526 40-340 40-395	Bm	FF	8-300 8-300 15-300	65-85 65-85 65-85
174	Survivair	9815-02 9815-22 9815-32 9815-42	Bm	FF	25 50 75 100 150 250	30-60 35-70 40-85 45-95 55-110 65-125
175	Survivair	9816-02 9816-22	Bm	FF	25 50 75 100 150 250	30-60 35-70 40-85 45-95 55-110 65-125
189	ISI	707.135.00 707.135.01 707.135.02 707.135.03	Bm	FF	25-300	80-120
194	Dual Safe	DS-100-0	Bm	FF	50-250	50-125
195	North	85400	Bm	FF	12.5-300	78-80
198	North	85500A	Bm	FF	12.5-300	78-80

SAR TYPE C PRESSURE DEMAND

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
212	Willson	6690-A,B,C,D S6690-A,B,C,D 6790-A,B,C,D S6790-A,B,C,D	Fm	FF	25-300	75-125
226	Respiratory Systems	101178-500	FM	FF	6	65-85
					25	65-85
					50	65-85
					75	70-85
					100	70-85
					150	70-85
					200	75-85
					250	75-85

3. Type C Demand

Approval

Approved for respiratory protection against atmospheres not immediately dangerous to life or health. Respirator only approved when used with respirable air.

Limitations

Not for use in atmospheres containing less than 19.5 percent oxygen.

Use only the hose lengths and pressure ranges specified on the approval label.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

SAR TYPE C DEMAND

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
65	Survivair	9011-12 9811-12	Fm	FF	4-250	50-125
66	Survivair	9011-14 9811-14	Fm	FF	4-250	50-125
75	MSA	84283 93928 94988 46539 457164 457165	Bm	ON,FF	8-300	50-125
91	MSA	457157 93224 93225 461666	Fm	ON,FF	8-300	50-90
205	MSA	480761 thru 480772 and 480778 thru 480781			8-300	50-80

4. Type CE Continuous Flow Abrasive Blasting

Approval

Approved for abrasive blasting and for respiratory protection against atmospheres not immediately dangerous to life or health. Respirator only approved when used with respirable air.

Limitations

Not for use in atmospheres containing less than 19.5 percent oxygen.

Use only the hose lengths and pressure ranges specified on the approval label.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

SAR TYPE CE CONTINUOUS FLOW ABRASIVE BLASTING

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
64	Cesco	PI-800-AA	Bm	HH	15-50	6-17
		PI-800-/DA/NA/AAHF			75-100	7-20
64	US Safety	PI-800-AA	Bm	HH	15-50	6-17
		PI-800-DA/-NA/-AAHF			75-100	7-20
64	Wheeler Protective Apparel	17032	Bm	HH	15-50	6-17
		17032A			75-100	7-20
		17036				
		17036H				
69	3M		Bm	HH	25 & 50	25-35
		W-280-100/50/25			100	30-45
		W-283-100/50/25*			200	35-60
		W-286-100/50/25			300	40-75
		W-292-100/50/25				
		W-308-100/50/25				
		W-313-100/50/25				
		W-314-100/50/25				
		W-318-100/50/25				
		W-321-100*S/M/L				
		W-321-25*S/M/L				
		W-321-50*S/M/L				
		W-329-100/50/25				
		W-332-100/50/25				
		W-335-100/50/25				
		W-338-100/50/25				
		W-346-100/50/25				
		W-352-100/50/25				
		W-368-25/50/100				
		W-371-25/50/100				
		W-810-100/50/25				
		W-840-100/50/25				
		W-856-100L/M/S*				
		W-856-25L/M/S				
		W-856-50L/M/S				
		W-858-100/50/25				
		W-870-100/50/25				
		W-858-100/50/25				
69	Pauli & Griffin*					
	Clemco*					
	Bowen Tools*					
	Empire Abrasive*					
	Kelco Sales*					
	Pangborn*					

SAR TYPE CE CONTINUOUS FLOW ABRASIVE BLASTING

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
70	3M		Bm	HH	25-100	60-80
		W-281-100/50/25				
		W-284-100/50/25*				
		W-287-100/50/25				
		W-293-100/50/25*				
		W-310-100/50/25				
		W-311-100/50/25				
		W-315-100/50/25				
		W-317-100/50/25				
		W-322-100/50/25L				
		W-322-100/50/25M				
		W-322-100S*/50S*/25S*				
		W-328-100/50/25				
		W-330-100/50/25				
		W-333-100/50/25				
		W-336-100/50/25				
		W-347-25/50/100				
		W-354-25/100/50				
		W-369-25/50/100				
		W-370-25/50/100				
		W-372-25/50/100				
		W-820-100/50/25				
		W-880-100/50/25				
		W-881-100/50/25L/M				
		W-881-100/50/25S*				
		W-888-100/50/25*				
		W-890-100/50/25				
	Pauli & Griffin					
	Clemco					
	Bowen Tools					
	Empire Abrasive					
	Kelco Sales					
	Pangborn					
79	Encon	6400*	Bm	HH	25-50	70-90
		01-6401-31				
		01-6401-32				
		01-6401-33				
		01-6401-34				
		01-6401-35				
		01-6401-36				
		01-6451-31				
		01-6451-32				
		01-6451-33				
		01-6451-34				
		01-6451-35				
		01-6451-36				

SAR TYPE CE CONTINUOUS FLOW ABRASIVE BLASTING

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
79	Schmidt	6400* 01-6401-37 01-6401-38 01-6401-39 01-6401-40 01-6401-41 01-6401-42	Bm	HH	25-50	70-90
81	MSA	460907 460908 460909 460910 461713 461714 461715 461716 480606 thru 480609 480682 thru 480688	Bm	HH	8-300	55-60
84	Bullard	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Anderson	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Bowen	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Quaker State	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Pauli and Griffin	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Empire	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95

SAR TYPE CE CONTINUOUS FLOW ABRASIVE BLASTING

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
84	Kelco	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Marthens	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Ace	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Clemtex	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	A-BEC	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Schmidt	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Matfer	77 46	Bm	HH	25-200 25-300 100 only	80-95 80-95 8-15
84	Air Components	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Porter Warner	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Clark Sand	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95

SAR TYPE CE CONTINUOUS FLOW ABRASIVE BLASTING

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
84	Sulliblast	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
84	Key Houston	77 46	Bm	HH	25-200 100 only 25-300	80-95 8-15 80-95
85	Clemco	46(PCE)	Bm	HH	25-200 100 only	80-95 8-15
86	AO	R6099 R5099 S5099 S6099	Bm	ON	12.5-75 100-175 200-300	7-15 13-25 18-35
87	3M Pangborn* Pauli&Griffin* Bowen Tools* Clemco* Empire Abrasive* Kelco*	W-270-100/50/25 W-271-100/50/25 W-272-100/50/25 W-274-100/50/25L/M/ W-274-100/50/25S* W-277-S/M/L* W-282-100/50/25 W-285-100/50/25* W-288-100/50/25 W-294-100/50/25* W-309-100/50/25 W-312-100/50/25 W-319-100/50/25 W-320-100/50/25M/L W-320-100/50/25S* W-323-100/50/25 W-327-100/50/25 W-331-100/50/25 W-334-100/50/25 W-337-25/50/100 W-348-25/50/100 W-353-25/50/100 W-373-25/50/100	Bm	HH	25-100	60-70

SAR TYPE CE CONTINUOUS FLOW ABRASIVE BLASTING

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
96	Cesco	801-AA/DA/NA/AAHF	Bm	HH	15-100	60-100
96	US Safety	801-AA/DA/NA/AAHF	Bm	HH	15-100	60-100
96	Wheeler Protective Apparel	17232 17232H 17236 17236H	Bm	HH	15-100	60-100
99	Pulmosan	20009	Bm	HH	15-50	17-20
100	Pulmosan	20027	Bm	HH	15-50	17-20
102	Bullard	999-3 999-4 999-5 999-6 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Anderson	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Bowen	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Pauli & Griffin	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15

SAR TYPE CE CONTINUOUS FLOW ABRASIVE BLASTING

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
102	Empire	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Deane	999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Kelco	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Titan	999-3 999-4 999-5 999-6 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	A-BEC	999-3 999-4 999-5 999-6	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Schmidt	999-3 999-4 999-5 999-6	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Key Houston	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15

SAR TYPE CE CONTINUOUS FLOW ABRASIVE BLASTING

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
102	Clemco	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Binks	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Air Components	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Ace	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Clemtex	999-3 999-4 999-5 999-7 999-8	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
102	Sulliblast	999-3 999-4 999-5 999-6	Bm	HH	10-100 10-100 100 only	12-25 80-100 8-15
105	MSA	463939 463979 480493 480709 480710	Bm	HH	8-300	55-60

SAR TYPE CE CONTINUOUS FLOW ABRASIVE BLASTING

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
106	MSA	463980 463981 480494 480711 480712	Bm	HH	8-50	16-20
107	MSA	463929 463930 463959 463962 463963 463967 480485 480487 480689 480690 480693 480694	Bm	HH	8-300	55-60
108	MSA	463960 463961 463964 463965 463968 463969 480486 480488 480691 480692 480695 480696	Bm	HH	8-50	16-20
116	MSA	463291 463292 463295 463296 463303 463304 463311 463312 480469 480471 480647 480648	Bm	HH	8-50	16-20

SAR TYPE CE CONTINUOUS FLOW ABRASIVE BLASTING

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
116 Cont.		480651 thru 480654 480476 480480 480661 480662				
117	MSA	463924 463982	Bm	HH	8-300	75-100
119	MSA	463935 463956 463957 463958 463936 463966	Bm	HH	8-300	75-100
130	Clemco	04400* 04401* 04402* 10505 10508 thru 10524	Bm	HH	10-200	85-45
161	MSA	466716 468720 473297 473299 480851/853/855/ 857/859/861/863/ 865/867/869/871/ 873/875/877/879/ 881/883/885/887/ 889/891/893/895/ 897/899/901/903/ 905/907/909/911/913 481779/781/783/ 785/787/789/791/ 793/795/797/799/ 801/803/805/807/ 809/811/813/815/ 817/819/821/823/ 825/827/829/831/833	Bm	FF	100-300 125-300 150-300	29-53 31-59 32-60

SAR TYPE CE CONTINUOUS FLOW ABRASIVE BLASTING

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
162	MSA	468718	Bm	FF	15-300	35-40
		458722				
		473298				
		473300				
		480852/854/856/				
		858/860/862/864/				
		866/868/870/872/				
		874/876/878/880/				
		882/884/886/888/				
		890/892/894/896/				
		898/900/902/904/				
		906/908/910/912/914				
		481780/782/784/				
		786/788/790/792				
		794/796/798/800				
		802/804/806/808				
		810/812/814/816				
		818/820/822/824				
		826/828/830/832/834/				
163	3M		Bm	HH	25	4-17
		W356-25/50/100				
		W357-25/50/100			50	4-17
		W358-25/50/100			100	4-17
		W360-25L/50L/100L				
		W360-25M/50M/100M				
		W361-25/50/100				
		W362-25/50/100				
		W364-25/50/100				
		W374-25/50/100		W374	25	4-9
		W375-25/50/100		only	50	5-11
					100	6-15
		W391				
		W395				
		W399				
170	Bullard			FF	25-100	9-22
		M-30/31/32/33/35			125-200	14-40
		M30V/31V/32V/33V			225-300	22-50
					10-100	45-75
					125-300	50-90
178	MSA	474263 thru 474266	Bm	FF	15-300	60-80
		480915 thru 480946				
		481835 through 481862				

SAR TYPE CE CONTINUOUS FLOW ABRASIVE BLASTING

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
216	Vortec	22800	Bm	HH	25-300	80-95

5. Type A

Approval

Approved for respiratory protection against atmospheres not immediately dangerous to life or health. Respirator only approved when used with respirable air.

Limitations

Not for use in atmospheres containing less than 19.5 percent oxygen.

Use only the hose lengths, RPM, or pressure ranges specified on the approval label.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow manufacturer's instructions for fitting the facepiece, for location of the blower, for preventing entanglement and fouling of the hose, or operation of the blower and for caring of the respirator while not in use.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

SAR TYPE A

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
101	MSA	463018 thru 463025	N/A	FF	50-250	N/A
148	MSA	466033	N/A	FF	50-250	N/A

6. Type B

Approval

Approved for respiratory protection against atmospheres not immediately dangerous to life or health. Respirator only approved when used with respirable air.

Limitations

Not for use in atmospheres containing less than 19.5 percent oxygen.

Use only the hose lengths specified on the approval label.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for locating the intake of the air supply hose.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

SAR TYPE B

Approval Number TC-19C-	Approval Issued to	Model Number(s)	Regulator or Valve Location	Face-piece Type	Hose Length feet	Pressure Range psi
77	MSA	457623	N/A	FF	Up to 75	N/A

PARTICULATE RESPIRATORS (21C)

D. Particulate Respirators

1. Single Use

Approval

Approved for respiratory protection against pneumoconiosis- and fibrosis-producing dusts and mists.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Follow the manufacturer's instruction for replacing respirators.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

PARTICULATE RESPIRATORS - SINGLE USE

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Other Approvals
132	3M	6983 8710 8550	D,M
143	Willson	1400*	
170A	North	7170	
173	3M	8800 8530	D,M
174	Binks	40-150*	
195	Glendale	(SU-1) GR-500	
214	Pulmosan	1410 CP1410 MM1410	D,M
215	Binks	40-145	D,M
238	Glendale	GR555	D
271	Gerson	1710	D,M,Z
292	Zee Med. Prod.	2303	D,M
293	Safety Supply	Respair 200	D,M,Z
315	Air-Tek	AT-100	D,M
347	North	7175	D,M

PARTICULATE RESPIRATORS - SINGLE USE

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Other Approvals
364	Balkamp	763-2271	D,M
416	New England Thermoplastics	0401	D,M

2. Dusts and Mists

Approval

Approved for respiratory protection against dusts and mists having an exposure limit measured as a time weighted average not less than 0.05 milligram per cubic meter or 2 million particles per cubic foot.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow manufacturer's instructions for changing filters and replacing respirators.

Particulate respirators may also be approved for asbestos containing dusts and mists as indicated in the last column.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

PARTICULATE RESPIRATORS - DUSTS AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
132	3M	6983 8550 8710	Su,ON	1	S
133	MSA	459440 466252 thru 466254 466530 466531 476729 thru 476731 479605 479606 479608 thru 479613	Rp,Fm,ON	2	
138	MSA	96000 457344	Rp,Fm,ON	1	
139	Willson	560	Rp,Fm,ON	1	
140	Willson	1210 1210R 1210S 1210SR 1210SS 1210SSS S1210 S1210R S1210S S1210SR S1210SS S1210SSS	Rp,Fm,ON	2	
144	AO	R4030 S4030 R5030 S5030 R5530 S5530 R6030 S6030 R6530 S6530	Rp,Fm,ON	2	
147	AO	R1050	Ru,ON	1	

PARTICULATE RESPIRATORS - DUSTS AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
151	North	7506* 7506S 7506M 7506L 7706S 7706M 7706L	Rp,Fm,ON	2	
153	North	7406L* 7406M*	Rp,Fm,ON	1	Z
154	Sellstrom	315-F100	Rp,Fm,ON	2	Z
154	Protech	1482-F100 1482-S-F100 1482-L-F100 1585S-F100 1585-F100 1585L-F100	Rp,Fm,ON	2	Z
154	Safe-Tex*	236-F100*	Rp,Fm,ON	2	Z
154	Eastern	E-450	Rp,Fm,ON	2	Z
156	MSA	461683	Rp,Fm,ON	1	
157	Pulmosan	C264* 10045 10213 10234 10294	Rp,Fm,ON	1	
159	MSA	460357	Rp,Fm,ON	1	
162	AO	R2100 R8100* S8100	Rp,Fm,ON	1	
163	Cesco	94R20*	Rp,Fm,ON	2	Z
164	Glendale	GR1600 GR2000 GR4000 GR8000	Rp,Fm,ON	2	Z

PARTICULATE RESPIRATORS - DUSTS AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
165	Pulmosan	L800* 10171 10174 10216 10297	Rp,Fm,ON	1	
166	AO	R2090N S2090N	Rp,Fm,ON	1	
167	DeVilbiss	MSD-507	Rp,Fm,ON	1	
170	North	7170	Ru,ON	1	
172	Glendale	GR1000 GR1500 GR3000 GR9000	Rp,Fm,ON	1	
173	3M	8800 8530	Su,ON	1	S
174	Binks	40-150	Su,ON	1	
175	North	7100 7100V	Rp,Fm,ON	1	
176	3M	9900	Su,ON	1	
177	Scott	6411-0100* 6411-2100*/6411-3100* 6412-0100*/6413-0100*/6413-2100*/6413-3100* 6421-0100*/6422-0100*/6423-0100* 64-D 64E-D 64M-D 64ME-D 64S-D 64SE-D 604035-00	Rp,Fm,ON	2	

PARTICULATE RESPIRATORS - DUSTS AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
179	US Safety	150L10 150T10	Rp,Fm,ON	2	
179	Stewart Warner	7932	Rp,Fm,ON	2	
180	Cesco	95RC15 95SMRC15	Rp,Fm,ON	2	
180	Northcott	70-451	Rp,Fm,ON	2	
181	MSA	462240 466212 468011 thru 468014 480046 thru 480054	Rp,Bm, ON	2	
182	Willson	1610 1710	Rp,Fm,FF	2	
188	MSA	461845 466242 466243 471730 471731 480389 480390 480391 483498	Rp,Fm,FF	2	
190	3M	9910	Su,ON	1	
191	North	7606 7606S 7606N* 7606SN*	Rp,Fm,FF	2	
197	Racal	AH5	PAPR,HH	1	Z

PARTICULATE RESPIRATORS - DUSTS AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
198	Scott	6470-0100* 6480-0100* 65-D 65S-D 65XL-D	Rp,Fm,FF	2	
206	MSA	467010	Rp,Fm,ON	1	Z
207	AO	R7030 S7030 R7730 S7730	Rp,Fm,FF	2	
211	Racal	AH21 AH15	PAPR,HH	1	Z
213	MSA	467559	Rp,Fm,ON	1	Z
214	Willson	1410 CP1410 MM1410	Ru,Su,ON	1	S
214	Pulmosan	1410	Ru,Su,ON	1	S
215	Binks	40-145	Ru,Su,ON	1	S
216	Cesco	96RC15	Rp,Fm,FF	2	
217	US Safety	151T10	Rp,Fm,FF	2	
220	MSA	467541	Ru,ON	1	
221	Pulmosan	10303 10306 10309 10312	Rp,Fm,ON	1	

PARTICULATE RESPIRATORS - DUSTS AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
224	3M	9906	Su,ON	1	
225	3M	W-316 W-343*	PAPR,H/H	1	
232	Survivair	2110-00 2210-00 2310-00	Rp,Fm,ON	2	
233	3M	9908	Su,ON	1	
234	3M	9913	Su,ON	1	
235	3M	W-325*	PAPR,HH	1	Z,AB
238	Glendale	GR555	Ru,Su,ON	1	
247	3M	9901 6982	Su,ON	1	A
253	Willson	3010 3010R 3010S 3010SR 3010SS 3010SSS S3010 S3010R S3010S S3010SR S3010SS S3010SSS	Rp,Bm,ON	2	
254	Willson	3110 3210	Rp,Bm,FF	2	
261	Glendale	GR7000	Rp,Fm,FF	2	A

PARTICULATE RESPIRATORS - DUSTS AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
264	AO	R1070	Su,ON	1	
266	AO	R2090AN S2090AN	Rp,Fm,ON	1	
267	DeVilbiss	MSD-512	Rp,Fm,ON	1	Z
271	Gerson	1710	Su,ON	1	Z,S
274	MSA	472783 472785 472787	Rp,Fm,ON	2	
279	3M	9915	Su,ON	1	
282	Pulmosan	10435	Rp,Fm,FF	1	
287	Moldex/Metric	2200	Su,ON	1	
288	Pirelli	4336.2027	Rp,Fm,ON	2	
289	3M	7218	Rp,Fm,ON	2	
290	Cesco	AD15*	Su,ON	1	
291	US Safety	AD10	Su,ON	1	
292	Zee Med. Prod.	2303	Su,ON	1	S
293	Safety Supply	Respair 200	Su,ON	1	Z,S
294	Neoterik	AB5 HH5	PAPR,HH	1	

PARTICULATE RESPIRATORS - DUSTS AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
295	Neoterik	AB6 VB6 VH6 HH6 SH6 SB6	PAPR,HH	1	
298	Racal	DM1 BR DM1 WR DM1 BL DM1 WL DM1 BRU DM1 WRU DM1 BLU DM1 WLU	PAPR,HH	1	Z
299	Racal	DM3-S DM3-U	PAPR,HH	1	Z
300	Pirelli	4333.2027	Rp,Fm,FF	2	
301	Safety Supply	F-160-F F-200-F F-800-F	Rp,Fm,ON	2	
302	Safety Supply	F-700-F	Rp,Fm,ON	2	
307	Willson	1510 1510R 1510SS	Rp,Fm,ON	2	
308	Willson	3510 3510R 3510SS	Rp,Bm,ON	2	
315	Air-Tek	AT-100	Su,ON	1	S
317	Dunrite	475785	Rp,Fm,ON	1	

PARTICULATE RESPIRATORS - DUSTS AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
318	3M	W425	PAPR,HH	1	AB
320	NZ Safety Ltd	NZ1710*	Su,ON	1	
322	Stewart-Warner	70-453	Su,ON	1	
328	AO	R1090	Su,ON	1	
334	AO	R1080	Su,ON	1	
335	AO	R1010	Su,ON	1	
344	Protech	1694-F100	Rp,Fm,FF	2	Z
347	North	7175	Su,ON	1	S
350	Moldex	2300	Su,ON	1	
351	AO	AO 1010	Su,ON	1	
352	Canadian Technical Tape	3535	Su,ON	1	
361	3M	8715	Su,ON	1	
363	3M	7818 7818C 7818L 7818H	Rp,Fm,FF For 7818C - Combination Type CF Air pressure (psig) 15 - 40 17 - 45 22 - 55 25 - 70	2 Hose length (feet) 25 - 50 75 - 100 125 - 200 225 - 300	

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
363 Cont.			For 7818L Air pressure range (psig) 15 - 40 17 - 45 22 - 55 25 - 70		
			Hose Length (ft)	Pressure Range (psig) 7818-H	Pressure Range (psig) 7818-L
			25	7.5 - 15.0	5.0 - 15.0
			50	8.0 - 15.0	5.0 - 15.0
			100	10.0 - 15.0	6.0 - 15.0
364	Balkamp	763-2271	Su,ON	1	Su
374	3M	9902	Su,ON	1	
376	Willson	6110S 6110M 6110L	ON,Rp,Fm	2	
383	Willson	6410 6510 S6410 S6510	FF,Rp,Fm	2	
386	Willson	6210S 6210M 6210L	ON,Rp,Fm	1	
389	Scott	66STC-D S66STC-D 66MTC-D S66MTC-D 66LTC-D S66LTC-D	Rp,Fm,ON	2	
401	3M	8710S 8710 6983	ON,Su	1	Z

PARTICULATE RESPIRATORS - DUSTS AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
410	3M	9900	Su, ON	1	Z
411	Koken	RE1210S-K RE1210L-K	ON,Fm	2	Z
415	3M	8715	Su, ON	1	Z
416	New England Thermoplastics	0401	Su, ON	1	S
420	AO	S7530 S7530C	FF,Rp,Fm	2 For S7530C Comb. Type C, CF Hose Length feet: 25 - 300 Air Press. psig: 14 - 37	
421	Glendale	GR9500	ON,Fm,Rp	2	
431	MSA	484455 484456 484457 484467 484468 484469	FF,Fm,Rp	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Air Press. psig: 65 - 80	
433	MSA	484021 484022 484023 484033 484034 484035	FF,Fm,Rp	2 Comb. Type C, CF Hose Length feet: 8 - 300 Air Press. psig: 35 - 40	

3. Dusts, Fumes and Mists

Approval

Approved for respiratory protection against dusts, fumes and mists having an exposure limit measured as a time weighted average not less than 0.05 milligram per cubic meter or 2 million particles per cubic foot.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow manufacturer's instructions for changing filters and replacing respirators.

Particulate respirators may also be approved for asbestos containing dusts and mists or radon daughters as indicated in the last column.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

PARTICULATE RESPIRATORS - DUSTS, FUMES AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
134	MSA	459438 461011 465360 465936	Rp,Bm,Fm,ON	2	R
141	Willson	1211 1211R 1211S 1211SR 1211SS 1211SSS S1211 S1211R S1211S S1211SR S1211SS S1211SSS	Rp,Fm,ON	2	
161	AO	R4056 S4056 R5056 S5056 R6056 S6056	Rp,Fm,ON	2	R
169	AO	R8156*	Rp,Fm,ON	1	
183	Willson	1611 1711	Rp,Fm,FF	2	
187	MSA	461847 465938 483479 483492	Rp,Fm,FF	2	R
189	Glendale	GR-1626 GR-2026 GR-4026 GR-8026	Rp,Fm,ON	2	

PARTICULATE RESPIRATORS - DUSTS, FUMES AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
193	US Safety	150T11*	Rp,Fm,ON	2	R,Z
194	Cesco	95RC16*	Rp,Fm,ON	2	R,Z
196	Eastern	E456	Rp,Fm,ON	2	R,Z
	Protech	1482-F108			R,Z
		1482-S-F108			
		1482-L-F108			
		1585S-F108			
		1585-F108			
		1585L-F108			
	Sellstrom	315-F108			R,Z
202	3M	9920	Su,ON	1	R
203	North	7507*	Rp,Fm,ON	2	
		7507S			
		7507M			
		7507L			
		7707S			
		7707M			
		7707L			
204	North	75BP07*	Rp,Bm,ON	2	
		75BP07M			
		75BP07L			
205	North	7607	Rp,Fm,FF	2	
		7607S			
		7607SN*			
		7607N*			

PARTICULATE RESPIRATORS - DUSTS, FUMES AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
209	Scott	6411-0300* 6413-0300* 6423-0300* 6412-0300* 6422-0300* 6421-0300* 64-F 64E-F 64ME-F 64S-F 64SE-F 64M-F	Rp,Fm,ON	2	R
210	Scott	6470-0300* 6480-0300* 65-F 65S-F 65XL-F	Rp,Fm,FF	2	R
218	Cesco	96RC16*	Rp,Fm,FF	2	R,Z
219	US Safety	151T11*	Rp,Fm,FF	2	R,Z
222	Willson	1213/R/S/SR/SS/SSS* S1213/R/S/SR/SS/SSS*	Rp,Fm,ON	2	
223	Willson	1613* 1713*	Rp,Fm,FF	2	
230	AO	R7056 S7056	Rp,Fm,FF	2	R
236	Survivair	2230-00* 2130-00* 2330-00*	Rp,Fm,ON	2	R
240	US Safety	150T15 150L15	Rp,Fm,ON	2	R

PARTICULATE RESPIRATORS - DUSTS, FUMES AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
241	Cesco	95RC19 95SMRC19	Rp,Fm,ON	2	R
242	US Safety	151T15	Rp,Fm,FF	2	R
243	Cesco	96RC19	Rp,Fm,FF	2	R
248	Sellstrom	315-G108	Rp,Fm,ON	2	
255	Willson	3011 3011R 3011S 3011SR 3011SS 3011SSS S3011 S3011R S3011S S3011SR S3011SS S3011SSS	Rp,Bm,ON	2	
256	Willson	3111 3211	Rp,Bm,FF	2	
262	Glendale	GR7026	Rp,Fm,FF	2	
268	AO	R4050W S4050W R5050W S5050W R6050W S6050W	Rp,Fm,ON	2	R
273	MSA	472754 472763	Rp,Bm,ON	2	R

PARTICULATE RESPIRATORS - DUSTS, FUMES AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
280	Survivair	2140-00 2240-00 2340-00	Rp,Fm,ON	2	R
297	AO	R4050AW S4050AW R5050AW S5050AW R6050AW S6050AW R5550AW S5550AW R4550AW S4550AW R6550AW S6550AW	Rp,Fm,ON	2	
303	Safety Supply	F-200-MF F-160-MF F-800-MF	Rp,Fm,ON	2	
304	Safety Supply	F-700-MF	Rp,Fm,FF	2	
305	AO	R4056A S4056A R5056A S5056A R6056A S6056A R5556A S5556A R6556A S6556A	Rp,Fm,ON	2	
306	AO	R7056A S7056A R7756A S7756A	Rp,Fm,FF	2	
309	Willson	1511, 1511R 1511SS	Rp,Bm,ON	2	

PARTICULATE RESPIRATORS - DUSTS, FUMES AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
310	Willson	3511, 3511R 3511SS	Rp,Fm,ON	2	
311	Willson	1513, 1513R 1513SS	Rp,Fm,ON	2	
312	Willson	3513 3513R 3513SS	Rp,Fm,ON	2	
323	MSA	476412 thru 476420 479649 thru 479657	Rp,Fm,ON	2	R
331	North	7509S 7509M 7509L 7709S 7709M 7709L	Rp,Fm,ON	2	
332	North	75BP09M 75BP09L	Rp,Fm,ON	2	

PARTICULATE RESPIRATORS - DUSTS, FUMES AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
333	North	7609 7609S	Rp,Fm,FF	2	
340	North	7590S/M/L 7790S/M/L	Rp,Fm,ON	2	
341	North	75BP90M 75BP90L	Rp,Fm,ON	2	
342	North	7690 7690S	Rp,Fm,FF	2	
345	Protech	1694-F108	Rp,Fm,FF	2	R,Z
348	3M	9925	Su,ON	1	R
365	Willson	1217/S/R/SR/SS/SSS S1217/S/R/SR/SS/SSS	ON,Rp,Fm	2	
366	Willson	1517, 1517R 1517SS	ON,Rp,Fm	2	
367	Willson	1617, 1717	FF,Rp,Fm	2	
368	Willson	3017/S/R/SR/SS/SSS S3017/S/R/SR/SS/SSS	ON,Rp,Bm	2	
369	Willson	3117, 3217	FF,Rp,Bm	2	
370	Willson	3517, 3517R 3517SS	ON,Rp,Bm	2	
388	North	7190	Su,ON	1	

PARTICULATE RESPIRATORS - DUSTS, FUMES, AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
390	Scott	66STC-F S66STC-F 66MTC-F S66MTC-F 66LTC-F S66LTC-F	Rp,Fm,ON	2	R
392	Jackson Products	RW-1*	Su, ON	1	
394	Willson	6120S 6120M 6120L	Rp,Fm,ON	2	R
395	Willson	6420 S6420 6520 S6520	Rp,Fm,FF	2	R
400	3M	9920	Su,ON	1	R,Z
409	3M	9925	Su,ON	1	R,Z
412	Koken	RE1280S-K RE1280L-K	ON,Rp,Fm	2	R,Z
418	Moldex	3400	Su,ON	1	R
419	AO	S7556A S7556AC	Rp,FF,Fm	2 For S7556AC Comb. Type C, CF Hose Length feet: 25 - 300 Air Press. psig: 14 - 37	
422	Glendale	GR9526	Rp,Fm,ON	2	

PARTICULATE RESPIRATORS - DUSTS, FUMES, AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
424	Willson	6220S 6220M 6220L	Rp,Fm,ON	1	
435	MSA	483990 484003	FF,Fm,Rp	2	R
				Comb. Hose Length feet	Type C, CF Air Press. psig
				8 - 300	35 - 40

4. High Efficiency

Approval

Approved for respiratory protection against dusts, fumes and mists having an exposure limit measured as a time weighted average less than 0.05 milligram per cubic meter and radionuclides.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow manufacturer's instructions for changing filters and replacing respirators.

Particulate respirators may also be approved for asbestos containing dusts and mists, radon daughters, as indicated in the last column.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

For Combination Type C Supplied Air Respirators with escape high efficiency respirators add the following limitations:

Use only the hose lengths and pressure ranges specified on the approval label.

When airflow is cut off, switch to filter and immediately exit to clean air.

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
135	MSA	459439 461010 465361 465935	Rp,Bm,Fm,ON	2	A
136A	3M	W-250* W-252* W-254* W-260-12 W-260-24* W-261-12 S*/M/L W-261-24 S*/M*/L* W-266-12 W-266-24* W-267* W-278-12 W-278-24* W-350* W-349-12 W-289-12 W-289-24* W-290* W-295-12* W-295-24* W-297* W-349-24*	PAPR,HH	1	R
137	3M	W-251* W-252 W-265-12 W-265-24*	PAPR,HH	1	AB
142	Willson	1212 1212R 1212S 1212SR 1212SS 1212SSS S1212 S1212R S1212S S1212SS S1212SSS S1212SR	Rp,Fm,ON	2	A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
149	Scott	6160-1050 6160-2050 6170-0050 6170-1050 6170-2050 6150-0050 6150-1050 6150-2050 6155-0050 6155-1050 6155-2050 6160-0050 6165-0050 6165-1050 6165-2050 6175-0050 6175-1050 6175-2050 662-1* 662-2* 6180-0050 6180-1050 6180-2050	Rp,Fm,FF	1	A
150	MSA	88479 457117 480826	Rp,Fm,FF	1	A
152	North	7580* 7580S 7780S 7580M 7780M 7580L 7780L	Rp,Fm,ON	2	A
155	MSA	460185 465937 483478 483491	Rp,Fm,FF	2	A
158	Pulmosan	C263* 10042 10231	Rp,Fm,ON	1	R,A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
160	AO	R4057* R5057* R6057*	Rp,Fm,ON	2	
168	North	75BP80* 75BP80M 75BP80L	Rp,Bm,ON	2	A
171	North	7680 7680N* 7680S 7680SN*	Rp,Fm,FF	2	A
178	Scott	6411-0050* 6411-2050* 6411-3050* 6412-0050* 6413-0050* 6413-2050* 6413-3050* 6421-0050* 6422-0050* 6423-0050* 604022-50 64-H 64E-H 64M-H 64ME-H 64S-H 64SE-H	Rp,Fm,ON	2	R,A
184	Willson	1612 1712	Rp,Fm,FF	2	A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
186	MSA	463353	PAPR,ON,FF	2	A
		463354			
		463355			
		466607			
		466608			
		467963			
		467964			
		478735			
		478736			
		480456			
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		480458			
		480067			
		480068			
		480069			
		480074			
		480075			
		480084			
		480085			
		480086			
		480090			
		480091			
		480092			
		484110			
		484111			
		484112			
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PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
199	Scott	6422-0050* 6480-0050* 65-H 65S-H 65XL-H	Rp,Fm,FF	2	R,A
200	MSA	466095 466096 478773 478774 480196 480198 480197	SAR,FF Combination Type C, CF 35 - 40 psig; 8-300 ft. hose	1	
201	MSA	466097 466098 466603 480202 480203 480204 480208 480209 480210	SAR,ON Combination Type C, CF 35 - 40 psig; 8-300 ft. hose	1	
208	AO	R7057*	Rp,Fm,FF	2	
212	Racal	AH3 AH3-1 AH3B AH3B-1 AH17 AH17-1	PAPR,HH	2	R,A
226	Cesco	95RC18 95SMRC18	Rp,Fm,ON	2	R,A
227	Cesco	96RC18	Rp,Fm,FF	2	R,A
228	US Safety	150T12 150L12	Rp,Fm,ON	2	R,A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
229	US Safety	151T12	Rp,Fm,FF	2	R,A
231	Protech	1482-G108 1482-S-G108 1482-L-G108 1585S-G108 1585-G108 1585L-G108	Rp,Fm,ON	2	R,A
237	Racal	AC3	PAPR,HH	2	R,A
239	3M	9940	Su,ON	1	R,A
244	Survivair	2190-00 2290-00 2390-00	Rp,Fm,ON	2	A
245	Survivair	3290-00 4290-00	Rp,Fm,FF ON,Bm,Rp	2 1	A A
246	3M	W-344	PAPR,HH	1	A
249	AO	R4057A S4057A R5057A S5057A R6057A S6057A R5557A S5557A R6557A S6557A	Rp,Fm,ON	2	R,A
250	AO	R7057A S7057A R7757A S7757A	Rp,Fm,FF	2	R,A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
251	North	10030S 10030M	Su	1	
252	Neoterik	AB3, HH3	PAPR,HH	1	R,A
257	Willson	3012 3012R 3012S 3012SR 3012SS 3012SSS S3012 S3012R S3012S S3012SR S3012SS S3012SSS	Rp,Bm,ON	2	A
258	Willson	3112, 3212	Rp,Bm,FF	2	A
263	Neoterik	AB4 HH4 VH4 VB4 SB4 SH4	PAPR,HH	1	R,A
265	3M	7206	Rp,Fm,ON	2	A,R
269	Neoterik	GET GEE GVT GVE GST GSE	PAPR,HH	1	A,R
270	Neoterik	AB10 HH10 SB10 VB10 VH10 SH10	PAPR,HH	1	A,R

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
272	MSA	472753 472762	Rp,Bm,ON	2	A
275	Racal	BE 1/P3	PAPR,HH	3	A,R
276	Racal	BE 3/P3 BE 7/P3	PAPR,FF	3	A,R
277	Racal	BE 5/P3	PAPR,HH	3	A,R
278	Racal	BE 6/P3	PAPR,HH	3	A,R
281	Pulmosan	10432	Rp,Fm,FF	1	A,R
283	Pirelli	4333.2017	Rp,Fm,FF	1	
284	Pirelli	4337.1100	Rp,Fm,ON	1	
285	Neoterik	AB8 HH8 VB8 VH8 SB8 SH8	PAPR,HH	1	A,R
286	Neoterik	AB7 HH7	PAPR,HH	1	A,R
296	AO	R8157A S8157A R8157A* S8157A*	Rp,Fm,ON	1	A,R
313	Willson	1512 1512R 1512SS	Rp,Fm,ON	2	A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
314	Willson	3512 3512R 3512SS	Rp,Bm,ON	2	A
316	Draeger	4031013 4031015	Rp,Fm,FF	1	
319	3M	W365	PAPR,HH	1	A,R,AB
321	Racal	BE17/P3	PAPR,HH	3	A,R
324	Racal	BE8/P3	PAPR,ON	3	A,R
325	Glendale	GR-2050 GR-4050 GR-1650 GR-8050	Rp,Fm,ON	2	A,R
326	Glendale	GR-7050	Rp,Fm,FF	2	A,R
327	Neoterik	NP1562-1	PAPR,ON	3	R
329	Racal	BE4/P3	PAPR,HH	3	A,R
330	Neoterik	NP1664-1 NP1564-2 NP1964-1	PAPR,FF	3	A,R
336	MSA	477978	Rp,Fm,ON NOT APPROVED FOR RADIONUCLIDES	2	A
337	MSA	477979	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
338	MSA	477977	Rp,Bm,ON NOT APPROVED FOR RADIONUCLIDES	2	A
339	MSA	487976	Rp,Bm,ON NOT APPROVED FOR RADIONUCLIDES	2	A
343	MSA	478116 478117 480947 480953 480959 480965 481001 481007 481013 481037 480971 480977 480983 480989 480995 481019 481025 481031	CE Combination Type C, CF 35-40 psig, 8 to 300 feet hose	1	A
346	Protech	1694-G108	Rp,Fm,FF	2	A,R
349	Eastern Safety	285	Rp,Fm,ON	2	A,R
353	Racal	PF/PP/7SP3	PAPR,FF	1	A,R
354	MSA	478740 thru 478745 480070 480071 480072 480093 480094 480095 480076	PAPR,ON NOT APPROVED FOR RADIONUCLIDES	2	A

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
354 Cont.		480077			
		480078			
		480087			
		480088			
		480089			
		484125			
		484126			
		484127			
		484131			
		484132			
		484133			
		484137			
		484138			
		484139			
		484143			
		484144			
		484145			
		484149			
		484150			
		484151			
		484155			
		484156			
		484157			
355	MSA	478737	PAPR,FF	2	A
		478738	NOT APPROVED FOR RADIONUCLIDES		
		478739			
		480459			
		480460			
		480461			
		484113			
		484114			
		484115			
		484119			
		484120			
		484121			
356	MSA	478760	Rp,Fm,FF	1	A
		478759	NOT APPROVED FOR RADIONUCLIDES		
		480827			

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
357	MSA	478779 478780 478781 480205 480206 480207 480211 480212 480213	SAR,ON NOT APPROVED FOR RADIONUCLIDES Combination Type C, CF 35 - 40 psig, 8-300 ft. hose	1	A
358	MSA	478775 478776 478778 478777 480199 480200 480201	SAR,FF NOT APPROVED FOR RADIONUCLIDES Combination Type C, CF 35 - 40 psig, 8-300 ft. hose	1	A
359	MSA	478761 478762 480952 480958 480964 480970 480976 480982 480988 481000 481018 480994 481006 481012 481024 481030 481036 481042	SAR,FF NOT APPROVED FOR RADIONUCLIDES Combination Type CE, CF 35 - 40 psig, 8-300 ft. hose	1	A
360	North	7880 7880S	SAR,FF Combination Type C, CF Air pressure (psig) / Hose length (feet) 11-35 / 12.5-50 12-36 / 75-125 16-45 / 150-225 19-50 / 250-300	2	A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
362	3M	7806 7806C 7806-L 7806-H	Rp,Fm,FF For 7806C Combination Type C, CF Air pressure (psig) 15 - 40 17 - 45 22 - 55 25 - 70	2 Hose length (feet) 25 - 50 75 - 100 125 - 200 225 - 300	A,R
			Hose Length (ft) / Pressure Range (psig) 7806-H / 7806-L 25 / 7.5 - 15.0 / 15-40 50 / 8.0 - 15.0 / 17-45 100 / 10.0 - 15.0 / 22-55 25-70		
371	Willson	2173 2273	FF,Rp,Fm	1	A
372	Willson	1853A/B/C/D/E 1863A/B/C/D/E	FF,Rp,Bm Combination Type C, CF Air pressure (psig) 6 - 65	1 Hose length (feet) 25 - 300	A
373	Willson	1813A/B/C/D/E	FF,Rp,Bm Combination Type C, CF Air pressure (psig) 6 - 65	1 Hose length (feet) 25 - 300	A
375	North	85780	Rp,Fm,FF Combination Type C, Pd Air pressure (psig) 78 - 80	2 Hose length (feet) 12.5 - 300	A
377	Willson	6140S 6140M 6140L	ON,Rp,Fm	2	A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
378	Willson	6240S 6240M 6240L	ON,Rp,Fm	1	A
379	Willson	6373A/B/C/D/E(S) 6373A/B/C/D/E(M) 6373A/B/C/D/E(L)	ON,Rp,Bm	1 Comb. Type C, CF Air Pres. psig: 6-65 Hose Length feet: 25-300	A
380	Willson	6673AL-A/B/C/D/E S6673AL-A/B/C/D/E 6773AL-A/B/C/D/E S6673AL-A/B/C/D/E	FF,Rp,Bm	1 Comb. Type C, CF Air Pres. psig: 6-65 Hose Length feet: 25-300	A
381	Willson	6473A/B/C/D/E S6473A/B/C/D/E 6573A/B/C/D/E S6573A/B/C/D/E	FF,Rp,Bm	1 Comb. Type C, CF Air Pres. psig: 6-65 Hose Length feet: 25-300	A
382	Racal	PD1-1 PD1-2	FF,Rp,Fm	1 Comb. Type C, CF Air Pres. psig: 85-120 Hose Length feet: 25-300	R,A
384	Willson	6440 S6440 6540 S6540	FF,Rp,Fm	2	A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
385	ISI	707.141.00 707.141.01 707.141.02 707.141.03 707.141.04	FF,Rp,Fm	1 Comb. Type C, Pd Air Press. psig: 80-120 Hose Length feet: 25-300	
387	Willson	6673 S6673 6773 S6773	Rp,Fm,FF	1	A
391	Scott	66STC-H S66STC-H 66MTC-H S66MTC-H 66LTC-H S66LTC-H	Rp,Fm,ON	2	A,R
393	Willson	6693-A,B,C,D S6693-A,B,C,D 6793-A,B,C,D S6793-A,B,C,D	Rp,Fm,FF	1 Comb. Type C, Pd Hose Length feet / Air Press. psig R714: 25 - 300 / 75 - 125 R814: 50 - 100 / 75 - 125 R825: 25 - 50 / 75 - 125	A
396	MSA	481886 481887 481903 481904 481909 481910 481911	ON,Rp,Bm	1 Comb. Type C, Pd Hose Length feet: 8 - 300 Air Press. psig: 65 - 85	A
397	MSA	481885 481889 481890 481897 481898 481899	FF,Bm,Rp	1 Comb. Type C, Pd Hose Length feet: 8 - 300 Air Press. psig: 65 - 85	A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
398	MSA	481894 481895 481896 481906 481907 481908 481912 481913 481914	ON,Bm,Rp NOT APPROVED FOR RADIONUCLIDES	1 Comb. Type C, Pd Hose Length feet: 8 - 300 Air Press. psig: 65 - 85	A
399	MSA	481891 481892 481893 481900 481901 481902	FF,Bm,Rp NOT APPROVED FOR RADIONUCLIDES	1 Comb. Type C, Pd Hose Length feet: 8 - 300 Air Press. psig: 65 - 85	A
402	Neoterik	1801 1801-1 1801-2 1801-3 1801-4	PAPR,HH	1	R,A,AB
403	Neoterik	1801-6	PAPR,ON	1	R,A
404	Neoterik	1801-5 1801-7	PAPR,FF	1	R,A
405	Neoterik	1900	PAPR,FF	3	R,A
406	Neoterik	1880 1880-1 1880-2 1880-3 1880-4 1880-5	Rp,Fm,FF Valve: 1840, 1841, 1842 Comb. Type C, CF Air Press. psig: 13-16, 50-60, 60-70 Hose Length feet: 25-100, 25-300, 25-300	2	R,A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
407	Neoterik	1880-PD 1880-1-PD 1880-2-PD 1880-3-PD 1880-4PD 1880-5PD	Rp,Fm,FF	2	R,A
				Comb. Type C, Pd	
				Hose Length feet	Press Range psig
			Valve		
			1840	50 - 300	10 - 26
			1841	50 - 300	30 - 47
			1842	50 - 300	44 - 64
408	Neoterik	1900-1PD 1900-2PD 1900-3PD	PAPR,FF	3	R,A
				Comb. Type C, Pd	
				Hose Length feet	Press Range psig
			Valve		
			1840	50 - 300	10 - 26
			1841	50 - 300	32 - 50
			1842	50 - 300	50 - 70
413	Koken	RE1290S-K RE1290L-K	ON,Rp,Fm	2	R,A
414	Survivair	9812-03	Rp,Fm,FF	2	A
				Comb. Type C,CF	
				Hose Length feet	Press. Range psig
				25 -300	30 - 125
417	AO	S7557A S7557AC	FF,Rp,Fm	2	R,A
				For S7557AC	
				Comb. Type C, CF	
				Hose Length feet	Press. Range psig
				25 - 300	14 - 37
423	Glendale	GR9550	Rp,Fm,ON	2	R,A

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
425	Neoterik	1900-1 1900-2 1900-3	FF,PAPR	3	R,A
			Comb. Valve	Comb. Type C, CF Hose Length feet	Press. Range psig
			1840	25 - 100	14 - 16
			1841	25 - 300	50 - 60
			1842	25 - 300	60 - 70
426	MSA	484378 484382 484383 484390 484391 484392	Rp,Bm,FF	1	A
				Comb. Type C, Pd Hose Length feet	Press. Range psig
				8 - 300	65 - 85
427	MSA	484379 484380 484381 484396 484397 484398 484402 484403 484404	Rp,Bm,FF	1	A
				Comb. Type C, Pd Hose Length feet	Press. Range psig
				8 - 300	65 - 85
428	MSA	484385 484386 484384 484393 484394 484395	Rp,Bm,FF	1	A
				Comb. Type C, Pd Hose Length feet	Press. Range psig
				8 - 300	65 - 85
429	MSA	484387 484388 484399 484400 484401 484405 484406 484407	Rp,Bm,ON	1	A
				Comb. Type C, Pd Hose Length feet	Press. Range psig
				8 - 300	65 - 85

PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
430	MSA	484485 484452 484453 484454 484464 484466 484465	Rp,Fm,FF	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	A
432	MSA	484458 484459 484460 484470 484471 484472	Rp,Fm,FF	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	A
434	MSA	484002 484018 484019 484020 484030 484031	Rp,Fm,FF	2 Comb. Type C, CF Hose Length feet: 8 - 300 Press. Range psig: 35 - 40	A
436	MSA	484024 484025 484026 484036 484037 484038	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2 Comb. Type C, CF Hose Length feet: 8 - 300 Press. Range psig: 35 - 40	A
437	3M	9970	Su,ON	1	
438	3M	9970	Su, ON	1	A

CHEMICAL CARTRIDGE RESPIRATORS (23C)

E. Chemical Cartridges

1. Ammonia

Approval

Approved for respiratory protection against not more than 300 parts per million ammonia.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
43	MSA	459436 461008	Rp,Fm,Bm,ON	2	D,M	MA
63	North	7504* 7504M 7704M 7504S 7704S 7504L 7704L	Rp,Fm,ON	2		MA
64	North	7514* 7514M 7714M 7514S 7714S 7514L 7714L	Rp,Fm,ON	2	D,M	MA
70	Willson	1224 S1224R 1224S S1224SS 1224SR S1224 S1224SSS S1224SR 1224SSS S1224S 1224R 1224SS	Rp,Fm,ON	2		MA
71	Willson	122410 S122410 122410S S122410R 122410SS S122410SR 1222410SSS S122410S 122410R S122410SS 122410SR S122410SSS	Rp,Fm,ON	2	D,M	MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
109	AO	R4054* R5054* R6054*	Rp,Fm,ON	2		MA
139	Willson	1624 1724	Rp,Fm,FF	2		MA
140	Willson	162410 172410	Rp,Fm,FF	2	D,M	MA
147	MSA	461851 483483	Rp,Fm,FF	2	D,M	MA
152	MSA	461857 483489	Rp,Fm,FF	2	H,A	MA
158	MSA	460849 461015	Rp,Fm,Bm,ON	2	H,A	MA
176	North	75BP04* 75BP04M 75BP04L	Rp,Bm,ON	2		MA
177	North	75BP14* 75BP14M 75BP14L	Rp,Bm,ON	2	D,M	MA
182	North	7604 7604S 7604N* 7604SN*	Rp,Fm,FF	2		MA
187	North	7614 7614S 7614N* 7614SN*	Rp,Fm,FF	2	D,M	MA
191	US Safety	150T22 150L22	Fm,ON	2		MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
192	Cesco	95RC65 95SMRC65	Fm,ON	2		MA
193	US Safety	150T27 150L27	Rp,Fm,ON	2	D,M	MA
194	Cesco	95RC95 95SMRC95	Rp,Fm,ON	2	D,M	MA
213	North	7584M 7784M 7584S 7784S 7584L 7784L 7584*	Rp,Fm,ON	2	H,R,A	MA
214	North	75BP84* 75BP84L 75BP84M	Rp,Bm,ON	2	H,R,A	MA
215	North	7684 7684S	Rp,Fm,FF	2	H,R,A	MA
217	3M	8727 8728	Su,ON	1	D,M 8728 only	MA
235	AO	R7054*	Rp,Fm,FF	2		MA
252	Scott	6411-0004* 6412-0004* 6413-0004* 6422-0004* 64-AM 64E-AM 64M-AM 64ME-AM 64S-AM 64SE-AM	Rp,Fm,ON	2		MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
253	Scott	6470-0004* 65-AM 6480-0004* 65S-AM 65XL-AM	Rp,Fm,FF	2		MA
254	Scott	6411-0104* 64-AM-D 6413-0104* 64E-AM-D 6421-0104* 64M-AM-D 6423-0104* 64ME-AM-D 6412-0104* 64S-AM-D 6422-0104* 64SE-AM-D	Rp,Fm,ON	2	D,M	MA
255	Scott	6470-0104* 6480-0104 65-AM-D 65S-AM-D 65XL-AM-D	Rp,Fm,FF	2	D,M	MA
256	Scott	6411-0304* 6412-0304* 6413-0304* 6421-0304* 6422-0304* 6423-0304* 64-AM-F 64E-AM-F 64M-AM-F 64ME-AM-F 64S-AM-F 64SE-AM-F	Rp,Fm,ON	2	D,F,M,R	MA
257	Scott	6470-0304* 6480-0304* 65-AM-F 65S-AM-F 656XL-AM-F	Rp,Fm,FF	2	D,F,M,R	MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
269	Cesco	96RC95	Rp,Fm,FF	2	D,M	MA
270	US Safety	151T27	Rp,Fm,FF	2	D,M	MA
279	Protech	1482-G106 1482-S-G106 1482-L-G106 1585S-G106 1585-G106 1585L-G106	Rp,Fm,ON	2		MA
280	Protech	1482-G106-F100 1482-S-G106-F100 1482-L-G106-F100 1585S-G106-F100 1585-G106-F100 1585L-G106-F100	Rp,Fm,ON	2	D,M	MA
283	Pulmosan	10018 10246 10192 10279	Rp,Fm,ON	1		MA
284	Pulmosan	10033 10207 10258 10291	Rp,Fm,ON	1	D,M	MA
289	Willson	1234 1234R 1234S 1234SR 1234SS 1234SSS S1234 S1234R S1234S S1234SR S1234SS S1234SSS	Rp,Fm,ON	2		MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
290	Willson	1634 1734	Rp,Fm,FF	2		MA
291	Willson	123412 123412R 123412S 123412SR 123412SS 123412SSS S123412 S123412R S123412S S123412SR S123412SS S123412SSS	Rp,Fm,ON	2	H,A	MA
292	Willson	163412 173412	Rp,Fm,FF	2	H,A	MA
314	Cesco	95RC60 95SMRC60	Rp,Fm,ON	2	H,R,A	MA
315	US Safety	150T42 150L42	Rp,Fm,ON	2	H,R,A	MA
316	Cesco	96RC60	Rp,Fm,FF	2	H,R,A	MA
317	US Safety	151T42	Rp,Fm,FF	2	H,R,A	MA
319	Sellstrom	315-G106	Rp,Fm,ON	2		MA
329	AO	R4054A S4054A R5054A S5054A R6054A S6054A R5554A S5554A R6554A S6554A	Rp,Fm,ON	2		MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
330	AO	R7054A S7054A R7754A S7754A	Rp,Fm,FF	2		MA
331	AO	R4054AD S4054AD R5054AD S5054AD R6054AD S6054AD R5554AD S5554AD R6554AD S6554AD	Rp,Fm,ON	2	D,M	MA
332	AO	R7054AD S7054AD R7754AD S7754AD	Rp,Fm,FF	2	D,M	MA
347	Eastern	E453	Rp,Fm,ON	2		MA
350	North	10004S 10004M	Su,ON	1		MA
358	North	10014S 10014M	Su,ON	1	D,M	MA
364	Willson	3024 3024S S3024 3024SR S3024S 3024R S3024R S3024SR S3024SS S3024SSS 3024SS 3024SSS	Rp,Bm,ON	2		MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
365	Willson	3124 3224	Rp,Bm,FF	2		MA
366	Willson	3034 3034S S3034 3034R S3034R 3034SR S3034S S3034SR S3034SS S3034SSS 3034SS 3034SSS	Rp,Bm,ON	2		MA
367	Willson	3134 3234	Rp,Bm,FF	2		MA
378	Willson	302410 S302410 302410S S302410R 302410R S302410SR 302410SR S302410SS S302410SSS 302410SS 302410SSS S302410S	Rp,Bm,ON	2	D,M	MA
379	Willson	312410 322410	Rp,Bm,FF	2	D,M	MA
384	Willson	303412 S303412 303412R S303412R 303412S S303412S	Rp,Bm,ON	2	H,A	MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
384 Cont.		303412SR S303412SS S303412SSS 303412SS 303412SSS S30314SR				
385	Willson	313412 323412	Rp,Bm,FF	2	H,A	MA
403	Glendale	GR1624 GR2024 GR4024 GR8024	Rp,Fm,ON	2		
412	Glendale	GR7024	Rp,Fm,FF	2	D,M	
419	AO	R5054HE S5054HE R4054HE S4054HE R6054HE S6054HE R5554HE S5554HE R6554HE S6554HE	Rp,Fm,ON	2	H,R,A	MA
420	AO	R7054HE S7054HE R7754HE S7754HE	Rp,Fm,FF	2	H,R,A	MA
422	Survivair	2104-00 2204-00 2304-00	Rp,Fm,ON	2		MA
423	Survivair	3204-00 4204-00	Rp,Fm,ON	2		MA
440	3M	7204	Rp,Fm,ON	2		MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
441	3M	7211	Rp,Fm,ON	2	D,M,Z	M
442	3M	7215	Rp,Fm,ON	2	H,R,A	MA
457	Protech	1482-G106-G208 1482-S-G106-G208 1482-L-G106-G208 1585S-G106-G208 1585-G106-G208 1585L-G106-G208	Rp,Fm,ON	2	H,R,A	MA
463	MSA	472751	Rp,Bm,ON	2	D,M	MA
468	MSA	472758	Rp,Bm,ON	2	H,A	MA
498	Pulmosan	10417	Rp,Fm,FF	1		MA
502	Pulmosan	10429	Rp,Fm,FF	1	D,M	MA
513	MSA	469730	Rp,Fm,ON	1		MA
515	Pirelli	4336.2022	Rp,Fm,ON	2		MA
519	Scott	64-AM-H 64E-AM-H 64M-AM-H 64ME-AM-H 64S-AM-H 64SE-AM-H	Rp,Fm,ON	2	H,R,A	MA
520	Scott	65-AM-H, 65S-AM-H 65XL-AM-H	Rp,Fm,FF	2	H,R,A	MA
528	Pirelli	4332.2022	Rp,Fm,FF	2		

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
544	Safety Supply	F-200-AM F-160-AM F-800-AM	Rp,Fm,ON	2		
545	Safety Supply	F-700-AM	Rp,Fm,FF	2		
559	Willson	1524 1524R 1524SS	Rp,Fm,ON	2		MA
560	Willson	3524 3524R 3524SS	Rp,Fm,ON	2		MA
561	Willson	1534 1534R 1534SS	Rp,Fm,ON	2		MA
562	Willson	3534 3534R 3534SS	Rp,Fm,ON	2		MA
575	Willson	152410 152410R 152410SS	Rp,Fm,ON	2	D,M	MA
576	Willson	352410 352410R 352410SS	Rp,Fm,ON	2	D,M	MA
581	Willson	153412 153412R 153412SS	Rp,Fm,ON	2	H,A	MA
582	Willson	353412 353412R 353412SS	Rp,Fm,ON	2	H,A	MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
589	Racal	BE1/K	PAPR,HH	3		MA
590	Racal	BE3/KC BE7/KC	PAPR,FF	3		MA
591	Racal	BE5/K	PAPR,HH	3		MA
592	Racal	BE6/K	PAPR,HH	3		MA
612	Racal	BE8/K	PAPR,ON	3		MA
623	Glendale	GR-1624-50 GR-2024-50 GR-4024-50 GR-8024-50	Rp,Fm,ON	2	H,R,A	MA
624	Glendale	GR-7024-50	Rp,Fm,FF	2	H,R,A	MA
628	Neoterik	NP-1562-8	PAPR,ON	3		MA
633	Racal	BE4/K	PAPR,HH	3		MA
639	Neoterik	NP1664-8 NP1564-8 1964-8	PAPR,FF	3		MA
641	Racal	BE1/KP3	PAPR,HH	3	H,R,A	MA
642	Racal	BE3/KP3 BE7/KP3	PAPR,FF	3	H,R,A	MA
643	Racal	BE4/KP3	PAPR,HH	3	H,R,A	MA
644	Racal	BE5/KP3	PAPR,HH	3	H,R,A	MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
645	Racal	BE6/KP3	PAPR,HH	3	H,R,A	MA
646	Racal	BE8/KP3	PAPR,ON	3	H,R,A	MA
658	North	7594S/M/L 7794S/M/L	Rp,Fm,ON	2	D,F,M	MA
659	North	75BP94M	Rp,Bm,ON	2	D,F,M	MA
660	North	7694 7694S	Rp,Fm,FF	2	D,F,M	MA
666	Protech	1694-G106	Rp,Fm,FF	2		MA
667	Protech	1694-G106-F100	Rp,Fm,FF	2	D,M	MA
674	Protech	1694-G106-G208	Rp,Fm,FF	2	H,R,A	MA
686	3M	7804 7804C 7804-H 7804-L	Rp,Fm,FF	2		MA

For 7804C Combination Type C, CF

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7804-H	7804-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
692	3M	7811 7811C 7811-L 7811-H	Rp,Fm,FF For 7811C Combination Type C, CF Air pressure (psig) 15 - 40 17 - 45 22 - 55 25 - 70	2 Hose length (feet) 25 - 50 75 - 100 125 - 200 225 - 300	D,M,Z	MA
			Hose Length (ft) / Pressure Range (psig) 7811-H / 7811-L 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0			
696	3M	7815 7815C 7815-L 7815-H	Rp,Fm,FF For 7815C Combination Type C, CF Air pressure (psig) 15 - 40 17 - 45 22 - 55 25 - 70	2 Hose length (feet) 25 - 50 75 - 100 125 - 200 225 - 300	H,R,A	MA
			Hose Length (ft / Pressure Range (psig) 7815-H / 7815-L 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0			
723	Willson	122417/S/R/SR/SS/SSS 122417/S/R/SR/SS/SSS	ON,Rp,Fm	2	D,F,M	MA
724	Willson	162417 172417	FF,Rp,Fm	2	D,F,M	MA
725	Willson	152417 152417R 152417SS	ON,Rp,Fm	2	D,F,M	MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
726	Willson	302417/S/R/SR/SS/SSS S302417/S/R/SR/SS/SSS	ON,Rp,Bm	2	D,F,M	MA
727	Willson	312417 322417	FF,Rp,Bm	2	D,F,M	MA
728	Willson	352417 352417R 352417SS	ON,Rp,Bm	2	D,F,M	MA
735	Willson	6104S 6104M 6104L	ON,Rp,Fm	2		MA
739	Willson	6204S 6204M 6204L	ON,Rp,Fm	1		MA
744	Willson	6404 S6404 6504 S6504	FF,Rp,Fm	2		MA
750	Willson	6414 S6414 6514 S6514	FF,Rp,Fm	2	DM	MA
752	Willson	6114S 6114M 6114L	ON,Rp,Fm	2	DM	MA
758	Willson	6214S 6214M 6214L	ON,Rp,Fm	1	DM	MA
761	Willson	6144S 6144M 6144L	Rp,ON,Fm	2	HA	MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
762	Willson	S6444 6444 6544 S6544	Rp,Fm,FF	2	HA	MA
772	Scott	66STC-AM S66STC-AM 66MTC-AM S66MTC-AM 66LTC-AM S66LTC-AM	Rp,Fm,ON	2		MA
773	Scott	66STC-AM-D S66STC-AM-D 66MTC-AM-D S66MTC-AM-D 66LTC-AM-D S66LTC-AM-D	Rp,Fm,ON	2	DM	MA
774	Scott	66STC-AM-F S66STC-AM-F 66MTC-AM-F S66MTC-AM-F 66LTC-AM-F S66LTC-AM-F	Rp,Fm,ON	2	DFMR	MA
775	Scott	66STC-AM-H S66STC-AM-H 66MTC-AM-H S66MTC-AM-H 66LTC-AM-H S66LTC-AM-H	Rp,Fm,ON	2	HRA	MA
785	Willson	6124S 6124M 6124L	Rp,Fm,ON	2	DFMR	MA
786	Willson	6424 S6424 6524 S6524	Rp,Fm,FF	2	DFMR	MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
795	AO	S7554HE S7554HEC	FF,Rp,Fm	2 For S7557HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	H,R,A	MA
800	AO	S7554A S7554AC	Rp,Fm,FF	2 For S7554AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		MA
810	AO	S7554AD S7554ADC	Rp,Fm,FF	2 For S7554ADC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	DM	MA
823	Glendale	GR9524	Rp,Fm,ON	2		
824	Glendale	GR9524-50	Rp,Fm,ON	2	HRA	
827	Willson	6224S 6224M 6224L	Rp,Fm,ON	1	DFM	MA
834	MSA	484477	Rp,Fm,FF	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	DM	MA
840	MSA	484483	Rp,Fm,FF	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	HA	MA

CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
845	MSA	483994	Rp,Fm,FF	2	DM	MA
				Comb. Type C, CF		
				Hose Length (feet)	Press. Range psig	
				8-300	35 - 40	
856	MSA	484000	Rp,Fm,FF	2	HA	MA
				Comb. Type C, CF		
				Hose Length (feet)	Press. Range psig	
				8-300	35 - 40	

2. Methyl Amine

Approval

Approved for respiratory protection against not more than 100 parts per million methyl amine.

Limitations

Not for use in atmospheres immediately dangerous to life and health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
43	MSA	459436 461008	Rp,Fm,Bm,ON	2	D,M	NH3
63	North	7504* 7504M 7704M 7504S 7704S 7504L 7704L	Rp,Fm,ON	2		NH3
64	North	7514* 7514M 7714M 7514S 7714S 7514L 7714L	Rp,Fm,ON	2	D,M	NH3
70	Willson	1224 S1224R 1224S S1224SS 1224SR S1224 S1224SSS S1224SR 1224SSS S1224S 1224R 1224SS	Rp,Fm,ON	2		NH3
71	Willson	122410 S122410 122410S S122410R 122410SS S122410SR 1222410SSS S122410S 122410R S122410SS 122410SR S122410SSS	Rp,Fm,ON	2	D,M	NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
109	AO	R4054* R5054* R6054*	Rp,Fm,ON	2		NH3
139	Willson	1624 1724	Rp,Fm,FF	2		NH3
140	Willson	162410 172410	Rp,Fm,FF	2	D,M	NH3
147	MSA	461851 483483	Rp,Fm,FF	2	D,M	NH3
152	MSA	461857 483489	Rp,Fm,FF	2	H,A	NH3
158	MSA	460849 461015	Rp,Fm,Bm,ON	2	H,A	NH3
176	North	75BP04* 75BP04M 75BP04L	Rp,Bm,ON	2		NH3
177	North	75BP14* 75BP14M 75BP14L	Rp,Bm,ON	2	D,M	NH3
182	North	7604 7604S 7604N* 7604SN*	Rp,Fm,FF	2		NH3
187	North	7614 7614S 7614N* 7614SN*	Rp,Fm,FF	2	D,M	NH3
191	US Safety	150T22 150L22	Fm,ON	2		NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
192	Cesco	95RC65 95SMRC65	Fm,ON	2		NH3
193	US Safety	150T27 150L27	Rp,Fm,ON	2	D,M	NH3
194	Cesco	95RC95 95SMRC95	Rp,Fm,ON	2	D,M	NH3
213	North	7584M 7784M 7584S 7784S 7584L 7784L 7584*	Rp,Fm,ON	2	H,A,R	NH3
214	North	75BP84* 75BP84L 75BP84M	Rp,Bm,ON	2	H,A,R	NH3
215	North	7684 7684S	Rp,Fm,FF	2	H,A,R	NH3
217	3M	8727 8728	Su,ON	1	D,M 8728 only	NH3
235	AO	R7054*	Rp,Fm,FF	2		NH3
252	Scott	6411-0004* 6412-0004* 6413-0004* 6422-0004* 64-AM 64E-AM 64M-AM 64ME-AM 64S-AM 64SE-AM	Rp,Fm,ON	2		NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
253	Scott	6470-0004* 6480-0004* 65-AM 65S-AM 65XL-Am	Rp,Fm,FF	2		NH3
254	Scott	6411-0104* 6412-0104* 6413-0104* 6421-0104* 6422-0104* 6423-0104* 64-AM-D 64E-AM-D 64M-AM-D 64ME-AM-D 64S-AM-D 64SE-AM-D	Rp,Fm,ON	2	D,M	NH3
255	Scott	6470-0104* 6480-0104* 65-AM-D 65S-AM-D 65XL-AM-D	Rp,Fm,FF	2	D,M	NH3
256	Scott	6411-0304* 6412-0304* 6413-0304* 6421-0304* 6422-0304* 6423-0304* 64-AM-F 64E-AM-F 64M-AM-F 64ME-AM-F 64S-AM-F 64SE-AM-F	Rp,Fm,ON	2	D,F,M,R	NH3
257	Scott	6470-0304* 6480-0304* 65-AM-F 65S-AM-F 656XL-AM-F	Rp,Fm,FF	2	D,F,M,R REMOVE Z	NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
269	Cesco	96RC95	Rp,Fm,FF	2	D,M	NH3
270	US Safety	151T27	Rp,Fm,FF	2	D,M	NH3
279	Protech	1482-G106 1482-S-G106 1482-L-G106 1585S-G106 1585-G106 1585L-G106	Rp,Fm,ON	2		NH3
280	Protech	1482-G106-F100 1482-S-G106-F100 1482-L-G106-F100 1585S-G106-F100 1585-G106-F100 1585L-G106-F100	Rp,Fm,ON	2	D,M	NH3
283	Pulmosan	10018 10192 10246 10279	Rp,Fm,ON	1		NH3
284	Pulmosan	10033 10207 10258 10291	Rp,Fm,ON	1	D,M	NH3
289	Willson	1234 1234R 1234S 1234SR 1234SS 1234SSS S1234 S1234R S1234S S1234SR S1234SS S1234SSS	Rp,Fm,ON	2		NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
290	Willson	1634 1734	Rp,Fm,FF	2		NH3
291	Willson	123412 123412R 123412S 123412SR 123412SS 123412SSS S123412 S123412R S123412S S123412SR S123412SS S123412SSS	Rp,Fm,ON	2	H,A	NH3
292	Willson	163412 173412	Rp,Fm,FF	2	H,A	NH3
314	Cesco	95RC60 95SMRC60	Rp,Fm,ON	2	H,A,R	NH3
315	US Safety	150T42 150L42	Rp,Fm,ON	2	H,A,R	NH3
316	Cesco	96RC60	Rp,Fm,FF	2	H,A,R	NH3
317	US Safety	151T42	Rp,Fm,FF	2	H,A,R	NH3
319	Sellstrom	315-G106	Rp,Fm,ON	2		NH3
329	AO	R4054A S4054A R5054A S5054A R6054A S6054A R5554A S5554A R6554A S6554A	Rp,Fm,ON	2		NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
330	AO	R7054A S7054A R7754A S7754A	Rp,Fm,FF	2		NH3
331	AO	R4054AD S4054AD R5054AD S5054AD R6054AD S6054AD R5554AD S5554AD R6554AD S6554AD	Rp,Fm,ON	2	D,M	NH3
332	AO	R7054AD S7054AD R7754AD S7754AD	Rp,Fm,FF	2	D,M	NH3
347	Eastern	E453	Rp,Fm,ON	2		NH3
350	North	10004S 10004M	Su,ON	1		NH3
358	North	10014S 10014M	Su,ON	1	D,M	NH3
364	Willson	3024 3024S S3024 3024SR S3024S 3024R S3024R S3024SR S3024SS S3024SSS 3024SS 3024SSS	Rp,Bm,ON	2		NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
365	Willson	3124 3224	Rp,Bm,FF	2		NH3
366	Willson	3034 3034S S3034 3034R S3034R 3034SR S3034S S3034SR S3034SS S3034SSS 3034SS 3034SSS	Rp,Bm,ON	2		NH3
367	Willson	3134 3234	Rp,Bm,FF	2		NH3
378	Willson	302410 S302410 302410S S302410R 302410R S302410SR 302410SR S302410SS S302410SSS 302410SS 302410SSS S302410S	Rp,Bm,ON	2	D,M	NH3
379	Willson	312410 322410	Rp,Bm,FF	2	D,M	NH3
384	Willson	303412 S303412 303412R S303412R 303412S S303412S	Rp,Bm,ON	2	H,A	NH3

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
384 Cont.		303412SR S303412SS S303412SSS 303412SS 303412SSS S30314SR				
385	Willson	313412 323412	Rp,Bm,FF	2	H,A	NH3
419	AO	R5054HE S5054HE R4054HE S4054HE R6054HE S6054HE R5554HE S5554HE R6554HE S6554HE	Rp,Fm,ON	2	H,A,R	NH3
420	AO	R7054HE S7054HE R7754HE S7754HE	Rp,Fm,FF	2	H,A,R	NH3
422	Survivair	2104-00 2204-00 2304-00	Rp,Fm,ON	2		NH3
423	Survivair	3204-00 4204-00	Rp,Fm,ON	2		NH3
440	3M	7204	Rp,Fm,ON	2		NH3
441	3M	7211	Rp,Fm,ON	2	D,M	NH3
442	3M	7215	Rp,Fm,ON	2	H,A,R	NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
457	Protech	1482-G106-G208 1482-S-G106-G208 1482-L-G106-G208 1585S-G106-G208 1585-G106-G208 1585L-G106-G208	Rp,Fm,ON	2	H,A,R	NH3
463	MSA	472751	Rp,Bm,ON	2	D,M	NH3
468	MSA	472758	Rp,Bm,ON	2	H,A	NH3
498	Pulmosan	10417	Rp,Fm,FF	1		NH3
502	Pulmosan	10429	Rp,Fm,FF	1	D,M	NH3
513	MSA	469730	Rp,Fm,ON	1		NH3
515	Pirelli	4336.2022	Rp,Fm,ON	2		NH3
519	Scott	64-AM-H 64E-AM-H 64M-AM-H 64ME-AM-H 64S-AM-H 64SE-AM-H	Rp,Fm,ON	2	H,A,R	NH3
520	Scott	65-AM-H, 65S-AM-H 65XL-AM-H	Rp,Fm,FF	2	H,A,R	NH3
544	Safety Supply	F-200-AM F-160-AM F-800-AM	Rp,Fm,ON	2		NH3
545	Safety Supply	F-700-AM	Rp,Fm,FF	2		NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
559	Willson	1524 1524R 1524SS	Rp,Fm,ON	2		NH3
560	Willson	3524 3524R 3524SS	Rp,Fm,ON	2		NH3
561	Willson	1534 1534R 1534SS	Rp,Fm,ON	2		NH3
562	Willson	3534 3534R 3534SS	Rp,Fm,ON	2		NH3
575	Willson	152410 152410R 152410SS	Rp,Fm,ON	2	D,M	NH3
576	Willson	352410 352410R 352410SS	Rp,Fm,ON	2	D,M	NH3
581	Willson	153412 153412R 153412SS	Rp,Fm,ON	2	H,A	NH3
582	Willson	353412 353412R 353412SS	Rp,Fm,ON	2	H,A	NH3
589	Racal	BE1/K	PAPR,HH	3		NH3
590	Racal	BE3/KC BE7/KC	PAPR,FF	3		NH3
591	Racal	BE5/K	PAPR,HH	3		NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
592	Racal	BE6/K	PAPR,HH	3		NH3
612	Racal	BE8/K	PAPR,ON	3		NH3
623	Glendale	GR-1624-50 GR-2024-50 GR-4024-50 GR-8024-50	Rp,Fm,ON	2	H,A,R	NH3
624	Glendale	GR-7024-50	Rp,Fm,FF	2	H,A,R	NH3
628	Neoterik	NP-1562-8	PAPR,ON	3		NH3
633	Racal	BE4/K	PAPR	3		NH3
639	Neoterik	NP1664-8 NP1564-8 1964-8	PAPR	3		NH3
641	Racal	BE1/KP3	PAPR,HH	3	H,A,R	NH3
642	Racal	BE3/KP3 BE7/KP3	PAPR,FF	3	H,A,R	NH3
643	Racal	BE4/KP3	PAPR,HH	3	H,A,R	NH3
644	Racal	BE5/KP3	PAPR,HH	3	H,A,R	NH3
645	Racal	BE6/KP3	PAPR,HH	3	H,A,R	NH3
646	Racal	BE8/KP3	PAPR,ON	3	H,A,R	NH3
658	North	7594S/M/L 7794S/M/L	Rp,Fm,ON	2	D,F,M	NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
659	North	75BP94M	Rp,Bm,ON	2	D,F,M	NH3
660	North	7694 7694S	Rp,Fm,FF	2	D,F,M	NH3
666	Protech	1694-G104-F100	Rp,Fm,FF	2		NH3
667	Protech	1694-G106-F100	Rp,Fm,FF	2	D,M	NH3
674	Protech	1694-G106-G208	Rp,Fm,FF	2	H,A,R	NH3
686	3M	7804 7804C 7804-L 7804-H	Rp,Fm,FF For 7804C Combination Type C, CF Air pressure (psig) / Hose length (feet) 15 - 40 / 25 - 50 17 - 45 / 75 - 100 22 - 55 / 125 - 200 25 - 70 / 225 - 300 Hose Length (ft) / Pressure Range (psig) 7804-H / 7804-L 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0	2		NH3
692	3M	7811 7811C 7811-L 7811-H	Rp,Fm,FF For 7811C Combination Type C, CF Air pressure (psig) / Hose length (feet) 15 - 40 / 25 - 50 17 - 45 / 75 - 100 22 - 55 / 125 - 200 25 - 70 / 225 - 300 Hose Length (ft) / Pressure Range (psig) 7811-H / 7811-L 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0	2	D,M	NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
696	3M	7815 7815C 7815-L 7815-H	Rp,Fm,FF For 7815C Combination Type C, CF Air pressure (psig) 15 - 44 17 - 45 22 - 55 25 - 70	2 Hose length (feet) 25 - 50 75 - 100 125 - 200 225 - 300	H,A,R	NH3
			Hose Length (ft) / Pressure Range (psig) 7815-H / 7815-L 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0			
723	Willson	122417/R/S/SR/SS/SSS S122417/R/S/SR/SS/SSS	ON,Rp,Fm	2	D,F,M	NH3
724	Willson	162417 172417	FF,Rp,Fm	2	D,F,M	NH3
725	Willson	152417 152417R 152417SS	ON,Rp,Fm	2	D,F,M	NH3
726	Willson	302417/R/S/SR/SS/SSS 302417/R/S/SR/SS/SSS	ON,Rp,Bm	2	D,F,M	NH3
727	Willson	312417 322417	FF,Rp,Bm	2	D,F,M	NH3
728	Willson	352417 352417R 352417SS	ON,Rp,Bm	2	D,F,M	NH3
735	Willson	6104S 6104M 6104L	ON,Rp,Fm	2		NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
739	Willson	6204S 6204M 6204L	ON,Rp,Fm	1		NH3
744	Willson	6404 S6404 6504 S6504	FF,Rp,Fm	2		NH3
750	Willson	6414 S6414 6514 S6514	FF,Rp,Fm	2	DM	NH3
752	Willson	6114S 6114M 6114L	ON,Rp,Fm	2	DM	NH3
758	Willson	6214S 6214M 6214L	ON,Rp,Fm	1	DM	NH3
761	Willson	6144S 6144M 6144L	Rp,ON,Fm	2	HA	NH3
762	Willson	S6444 6444 6544 S6544	Rp,Fm,FF	2	HA	NH3
772	Scott	66STC-AM S66STC-AM 66MTC-AM S66MTC-AM 66LTC-AM S66LTC-AM	Rp,Fm,ON	2		NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
773	Scott	66STC-AM-D S66STC-AM-D 66MTC-AM-D S66MTC-AM-D 66LTC-AM-D S66LTC-AM-D	Rp,Fm,ON	2	DM	NH3
774	Scott	66STC-AM-F S66STC-AM-F 66MTC-AM-F S66MTC-AM-F 66LTC-AM-F S66LTC-AM-F	Rp,Fm,ON	2	DFMR	NH3
775	Scott	66STC-AM-H S66STC-AM-H 66MTC-AM-H S66MTC-AM-H 66LTC-AM-H S66LTC-AM-H	Rp,Fm,ON	2	HRA	NH3
785	Willson	6124S 6124M 6124L	Rp,Fm,ON	2	DFMR	NH3
786	Willson	6424 S6424 6524 S6524	Rp,Fm,FF	2	DFMR	NH3
795	AO	S7554HE S7554HEC	FF,Rp,Fm	2 For S7557HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	H,R,A	NH3
800	AO	S7554A S7554AC	Rp,Fm,FF	2 For S7554AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		NH3

CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
810	AO	S7554AD S7554ADC	Rp,Fm,FF	2 For S7554ADC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	DM	NH3
827	Willson	6224S 6224M 6224L	Rp,Fm,ON	1	DFM	NH3
834	MSA	484477	Rp,Fm,FF	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	DM	NH3
840	MSA	484483	Rp,Fm,FF	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	HA	NH3
845	MSA	483994	Rp,Fm,FF	2 Comb. Type C, CF Hose Length (feet): 8-300 Press. Range psig: 35 - 40	DM	NH3
856	MSA	484000	Rp,Fm,FF	2 Comb. Type C, CF Hose Length (feet): 8-300 Press. Range psig: 35 - 40	HA	NH3

3. Chlorine

Approval

Approved as respiratory protection against not more than 10 parts per million chlorine.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
41	MSA	459434 461006	Rp,Fm,Bm,ON	2	D,M	SO2/HCl CH2-O
47	MSA	459435 461007	Rp,Fm,Bm,ON	2	D,M	OV/SO2/HCl CH2-O
55	Scott	70-CL Replaced by TC-23C-492	Es,MP	1		
60	AO	R4052* R5052* R6052*	Rp,Fm,ON	2		SO2/HCl
65	North	7503* 7503M 7703M 7503S 7703S 7503L 7703L	Rp,Fm,ON	2		OV/SO2/HCl CH2-O
66	North	7513* 7513M 7713M 7513S 7713S 7513L 7713L	Rp,Fm,ON	2	D,M	OV/SO2/HCl CH2-O
76	Willson	1225 S1225 1225S S1225S 1225SR S1225SR S1225R S1225SS S1225SSS 1225SSS 1225R 1225SS	Rp,Fm,ON	2		OV/SO2/HCl

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
77	Willson	122510 122510R 122510S 122510SR 122510SS 122510SSS S122510 S122510R S122510S S122510SR S122510SS S122510SSS	Rp,Fm,ON	2	D,M	OV/SO2/HCl
82	AO	R4053* R5053* R6053*	Rp,Fm,ON	2		OV/SO2/HCl
85	AO	R8153 S8153	Rp,Fm,ON	1		OV/SO2/HCl CH2-O
104	North	75BP03* 75BP03M 75BP03L	Rp,Bm,ON	2		OV/SO2/HCl CH2-O
105	North	75BP13* 75BP13M 75BP13L	Rp,Bm,ON	2	D,M	OV/SO2/HCl CH2-O
108	MSA	460400 460378	Es,M	1	D,M	HCl
111	AO	R9722	Es,M	1	D,M	SO2/HCl

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
115	Scott	6411-0001* 6413-0001* 6421-0001* 6422-0001* 6423-0001* 6412-0001* 64-AG 64E-AG 64M-AG 64ME-AG 64S-AG 64SE-AG	Rp,Fm,ON	2		SO2/HCl CH2-O
116	Scott	6411-0101* 6413-0101* 6421-0101* 6423-0101* 6412-0101* 6422-0101* 64-AG-D 64E-AG-D 64M-AG-D 64ME-AG-D 64S-AG-D 64SE-AG-D	Rp,Fm,ON	2	D,M	SO2/HCl CH2-O
122	North	7542* 7542M*	Rp,Fm,ON	2	D,M,Z	SO2/HCl
129	3M	8714 8720	Su,ON	1	D,M 8720 only	SO2/HCl
141	Willson	1625 1725	Rp,Fm,FF	2		OV/SO2/HCl
142	Willson	162510 172510	Rp,Fm,FF	2	D,M	OV/SO2/HCl
145	MSA	461849 483481	Rp,Fm,FF	2	D,M	SO2/HCl CH2-O

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
146	MSA	461850 483482	Rp,Fm,FF	2	D,M	OV/SO2/HCl CH2-O
150	MSA	461854 483486	Rp,Fm,FF	2	H,A	SO2/HCl CH2-O
153	MSA	461855 483487	Rp,Fm,FF	2	H,A	OV/SO2/HCl CH2-O
154	MSA	461856 483488	Rp,Fm,FF	2	D,F,M,R	OV/SO2/HCl CH2-O
156	MSA	461835 462239	Rp,Fm,Bm,ON	2	H,A	SO2/HCl CH2-O
159	MSA	460847 461013	Rp,Fm,Bm,ON	2	H,A	OV/SO2/HCl CH2-O
160	MSA	460848 461014	Rp,Fm,Bm,ON	2	D,F,M,R	OV/SO2/HCl CH2-O
163	Protech	1482-G104 1482-S-G104 1482-L-G104 1482-G104-F100 1482-S-G104-F100 1482-L-G104-F100 1585S-G104 1585-G104 1585L-G104 1585S-G104-F100 1585-G104-F100 1585L-G104-F100	Rp,Fm,ON	2	D,M,Z 1482-G104-F100 only 1482-S-G104-F100 only 1482-L-G104-F100 only 1585-G104-F100 only 1585S-G104-F100 only 1585L-G104-F100 only	OV/SO2/HCl
163	Sellstrom	315-G104 315-G104-F100	Rp,Fm,ON	2	D,M,Z 315-G104-F100 only	OV/SO2/HCl
163	Eastern	E-452	Rp,Fm,ON	2	D,M,Z	OV/SO2/HCl

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
164	Cesco	95RC55 95SMRC55	Fm,ON	2		SO2/HCl
165	Cesco	95RC75 95SMRC75	Rp,Fm,ON	2	D,M	SO2/HCl
166	Cesco	95RC85 95SMRC85	Fm,ON	2		OV/SO2/HCl
167	Cesco	95RC105 95SMRC105	Rp,Fm,ON	2	D,M	OV/SO2/HCl
168	US Safety	150T21 150L21	Fm,ON	2		SO2/HCl
169	US Safety	150T25 150L25	Rp,Fm,ON	2	D,M	SO2/HCl
170	US Safety	150T26 150L26	Fm,ON	2		OV/SO2/HCl
171	US Safety	150T28 150L28	Rp,Fm,ON	2	D,M	OV/SO2/HCl
172	Scott	6411-0015* 64-OA 6413-0015* 64E-OA 6421-0015* 64M-OA 6423-0015* 64ME-OA 6412-0015* 64S-OA 6422-0015* 64SE-OA	Fm,ON	2		OV/SO2/HCl CH2-O

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
174	Scott	6411-0115* 6412-0115* 6413-0115* 6421-0115* 6422-0115* 6423-0115* 64-OA-D 64E-OA-D 64M-OA-D 64ME-OA-D 64S-OA-D 64SE-OA-D 604032-15*	Fm,ON	2	D,M	OV/SO2/HCl CH2-O
179	North	75BP42* 75BP42M*	Rp,Bm,ON	2	D,M,Z	SO2/HCl
181	North	7603 7603S 7603N* 7603SN*	Rp,Fm,FF	2		OV/SO2/HCl CH2-O
183	Glendale	GR-1622 GR-2022 GR-4022 GR-8022	Rp,Fm,ON	2		SO2/HCl
184	Glendale	GR-1622-10 GR-2022-10 GR-4022-10 GR-8022-10	Rp,Fm,ON	2	D,M	SO2/HCl
186	North	7613 7613S 7613N* 7613SN*	Rp,Fm,FF	2	D,M	OV/SO2/HCl CH2-O
189	North	7642* 7642S* 7642N* 7642SN*	Rp,Fm,FF	2	D,M,Z	SO2/HCl

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
195	3M	8721 8722	Su,ON	1	D,M 8722 only	
196	3M	8723 8724	Su,ON	1	D,M 8724 only	OV
203	Pulmosan	10012 10186 10240 10273	Rp,Fm,ON	1		SO2/HCl
207	North	7582M 7782M 7582S 7782S 7582L 7782L 7582*	Rp,Fm,ON	2	H,R,A	SO2/HCl CH2-O
208	North	75BP82* 75BP82M 75BP82L	Rp,Bm,ON	2	H,R,A	SO2/HCl CH2-O
209	North	7682 7682S	Rp,Fm,FF	2	H,R,A	SO2/HCl CH2-O
210	North	7583M 7783M 7583S 7783S 7583L 7783L 7583*	Rp,Fm,ON	2	H,R,A	SO2/HCl/OV CH2-O
211	North	75BP83* 75BP83M 75BP83L	Rp,Bm,ON	2	H,R,A	SO2/HCl/OV CH2-O
212	North	7683S 7683	Rp,Fm,FF	2	H,R,A	SO2/HCl/OV CH2-O

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
216	3M	8725 8726	Su,ON	1	D,M 8726 only	OV/SO2/HCl
218	Scott	6470-0101* 6480-0101* 65-AG-D 65S-AG-D 65XL-AG-D	Rp,Fm,FF	2	D,M	SO2/HCl CH2-O
221	Scott	6470-0015* 6480-0015* 65-OA 65S-OA 65XL-OA	Rp,Fm,FF	2		OV/SO2/HCl CH2-O
222	Scott	6470-0115* 6480-0115* 65-OA-D 65S-OA-D 65XL-OA-D	Rp,Fm,FF	2	D,M	OV/SO2/HCl CH2-O
225	Scott	6470-0001 6480-0001 65-AG 65S-AG 65XL-AG	Rp,Fm,FF	2		SO2/HCl CH2-O
226	North	7502* 7502S 7702S 7502M 7702L 7502L 7702M	Rp,Fm,ON	2		SO2/HCl CH2-O
227	North	75BP02* 75BP02M 75BP02L	Rp,Bm,ON	2		SO2/HCl CH2-O
228	North	7602 7602S 7602N* 7602SN*	Rp,Fm,FF	2		SO2/HCl CH2-O

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
229	North	7512* 7512S 7512M 7512L 7712S 7712M 7712L	Rp,Fm,ON	2	D,M	SO2/HCl CH2-O
230	North	75BP12* 75BP12M 75BP12L	Rp,Bm,ON	2	D,M	SO2/HCl CH2-O
231	North	7612 7612S 7612N* 7612SN*	Rp,Fm,FF	2	D,M	SO2/HCl CH2-O
232	Pulmosan	10027 10201 10252 10285	Rp,Fm,ON	1	D,M	SO2/HCl
233	AO	R7052*	Rp,Fm,FF	2		SO2/HCl
234	AO	R7053*	Rp,Fm,FF	2		OV/SO2/HCl
241	Glendale	GR-1623 GR-2023 GR-4023 GR-8023	Rp,Fm,ON	2		OV/SO2/HCl
242	Glendale	GR1623-10 GR2023-10 GR4023-10 GR8023-10	Rp,Fm,ON	2	D,M	OV/SO2/HCl

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
246	Scott	6411-0301* 64-AG-F 6413-0301* 64E-AG-F 6421-0301* 64M-AG-F 6423-0301* 64ME-AG-F 6412-0301* 64S-AG-F 6422-0301* 64SE-AG-F	Rp,Fm,ON	2	D,F,M,R	SO2/HCl CH2-O
247	Scott	6470-0301* 6480-0301* 65-AG-F 65S-AG-F 65XL-AG-F	Rp,Fm,FF	2	D,F,M,R	SO2/HCl CH2-O
250	Scott	6411-0315* 64-OA-F 6413-0315* 64M-OA-F 6421-0315* 64ME-OA-F 6423-0315* 64E-OA-F 6412-0315* 64S-OA-F 6422-0315* 64SE-OA-F	Rp,Fm,ON	2	D,F,M,R	OV/SO2/HCl CH2-O
251	Scott	6470-0315* 6480-0315* 65-OA-F 65S-OA-F 65XL-OA-F	Rp,Fm,FF	2	D,F,M,R	OV/SO2/HCl CH2-O
260	MSA	466903	Rp,Fm,ON	2	D,M	OV/SO2/HCl CH2-O
261	MSA	466902	Rp,Bm,ON	2	D,M	OV/SO2/HCl CH2-O

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
262	MSA	466904 483494	Rp,Fm,FF	2	D,M	OV/SO2/HCl CH2-O
265	Cesco	96RC75	Rp,Fm,FF	2	D,M	SO2/HCl
266	US Safety	151T25	Rp,Fm,FF	2	D,M	SO2/HCl
267	Cesco	96RC105	Rp,Fm,FF	2	D,M	OV/SO2/HCl
268	US Safety	151T28	Rp,Fm,FF	2	D,M	OV/SO2/HCl
281	AO	R4563 S4563 R5563 S5563 R6563 S6563	Rp,Fm,ON	2	D,F,M	OV/SO2/HCl Pest
282	AO	R7563 S7563	Rp,Fm,FF	2	D,F,M	OV/SO2/HCl Pest
288	North	7902	Es,M	1		SO2/HCl
298	Willson	1235 1235S S1235 1235SR S1235R S1235S S1235SS S1235SSS 1235SSS 1235R 1235SS 1235R	Rp,Fm,ON	2		OV/SO2/HCl

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
299	Willson	123512 S123512 123512S S123512R 123512SR S123512S S123512SS S123512SSS 123512SSS 123512R 123512SS S123512SR	Rp,Fm,ON	2	H,A	OV/SO2/HCl
300	Willson	1635 1735	Rp,Fm,FF	2		OV/SO2/HCl
301	Willson	163512 173512	Rp,Fm,FF	2	H,A	OV/SO2/HCl
306	Cesco	95RC50 95SMRC50	Rp,Fm,ON	2	H,R,A	SO2/HCl
307	US Safety	150T41 150L41	Rp,Fm,ON	2	H,R,A	SO2/HCl
308	Cesco	96RC50	Rp,Fm,FF	2	H,R,A	SO2/HCl
309	US Safety	151T41	Rp,Fm,FF	2	H,R,A	SO2/HCl
310	Cesco	95RC80 95SMRC80	Rp,Fm,ON	2	H,R,A	OV/SO2/HCl
311	US Safety	150T46 150L46	Rp,Fm,ON	2	H,R,A	OV/SO2/HCl
312	Cesco	96RC80	Rp,Fm,FF	2	H,R,A	OV/SO2/HCl
313	US Safety	151T46	Rp,Fm,FF	2	H,R,A	OV/SO2/HCl

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
318	Survivair	2203-00 2103-00 2303-00	Rp,Fm,ON	2		OV/SO2/HCl
320	Pulmosan	10015 10189 10243 10276	Rp,Fm,ON	1		OV/SO2/HCl
324	Pulmosan	10030 10255 10204 10288	Rp,Fm,ON	1	D,M	OV/SO2/HCl
339	AO	R4052A S4052A R5052A S5052A R6052A S6052A R5552A S5552A R6552A S6552A	Rp,Fm,ON	2		SO2/HCl
340	AO	R7052A S7052A R7752A S7752A	Rp,Fm,FF	2		SO2/HCl
341	AO	R4052AD R5052AD R6052AD S4052AD S5052AD S6052AD R5552AD S5552AD R6552AD S6552AD	Rp,Fm,ON	2	D,M	SO2/HCl

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
342	AO	R7052AD S7052AD R7752AD S7752AD	Rp,Fm,FF	2	D,M	SO2/HCl
343	AO	R4053A S4053A R5053A S5053A R6053A S6053A R5553A S5553A R6553A S6553A	Rp,Fm,ON	2		OV/SO2/HCl CLO2
344	AO	R7053A 57053A R7753A S7753A	Rp,Bm,FF	2		OV/SO2/HCl CLO2
345	AO	R4053AD S4053AD R5053AD S5053AD R6053AD S6053AD R5553AD S5553AD R6553AD S6553AD	Rp,Fm,ON	2	D,M	OV/SO2/HCl
346	AO	R7053AD S7053AD R7753AD S7753AD	Rp,Fm,FF	2	D,M	OV/SO2/HCl
352	North	10003S 10003M	Su,ON	1		OV/SO2/HCl CH2-O
353	North	10002S 10002M	Su,ON	1		SO2/HCl CH2-O

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
356	North	10012S 10012M	Su,ON	1	D,M	SO2/HCl CH2-O
357	North	10013S 10013M	Su,ON	1	D,M	OV/SO2/HCl CH2-O
359	Protech	1482-G102 1482-S-G102 1482-L-G102 1585S-G102 1585-G102 1585L-G102	Rp,Fm,ON	2		SO2/HCl
368	Willson	3025 3025S S3025 3025R S3025R 3025SR S3025S 3025SSS S3025SS S305SSS 3025SS 3025SR	Rp,Bm,ON	2		OV/SO2/HCl
369	Willson	3125 3225	Rp,Bm,FF	2		OV/SO2/HCl
370	Willson	3035 3035S S3035 3035R S3035S 3035SR S3035R S3035SR S3035SS S3035SSS 3035SS 3035SSS	Rp,Bm,ON	2		OV/SO2/HCl
371	Willson	3135 3235	Rp,Bm,FF	2		OV/SO2/HCl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
380	Willson	302510 S302510 302510R S302510S 302510S S302510R 302510SR S302510SR S302510SS S302510SSS 302510SS 302510SSS	Rp,Bm,ON	2	D,M	OV/SO2/HCl
381	Willson	312510 322510	Rp,Bm,FF	2	D,M	OV/SO2/HCl
386	Willson	303512 303512R 303512S 303512SR 303512SS 303512SSS S303512 S303512R S303512S S303512SR S303512SS S303512SSS	Rp,Bm,ON	2	H,A	OV/SO2/HCl
387	Willson	313512 323512	Rp,Bm,FF	2	H,A	OV/SO2/HCl
393	Survivair	2133-00* 2233-00* 2333-00*	Rp,Fm,ON	2	D,F,M,R	OV/SO2/HCl
394	Survivair	3233-00*	Rp,Fm,FF	2	D,F,M,R	OV/SO2/HCl
395	Survivair	2192-00 2292-00 2392-00	Rp,Fm,ON	2	H,A	SO2/HCl

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
396	Survivair	3292-00 4292-00	Rp,Fm,FF	2	H,A	SO2/HCl
407	Glendale	GR7022	Rp,Fm,FF	2		SO2/HCl
408	Glendale	GR7022-10	Rp,Fm,FF	2	D,M	SO2/HCl
410	Glendale	GR7023	Rp,Fm,FF	2		OV/SO2/HCl
411	Glendale	GR7023-10	Rp,Fm,FF	2	D,M	OV/SO2/HCl
415	AO	R4052HE S4052HE R5052HE S5052HE R6052HE S6052HE R5552HE S5552HE R6552HE S6552HE	Rp,Fm,ON	2	H,R,A	SO2/HCl
416	AO	R7052HE S7052HE R7752HE S7752HE	Rp,Fm,FF	2	H,R,A	SO2/HCl
417	AO	R4053HE S4053HE R5053HE S5053HE R6053HE S6053HE R5553HE S5553HE R6553HE S6553HE	Rp,Fm,ON	2	H,R,A	OV/SO2/HCl CLO2/Pest
418	AO	R7053HE S7053HE R7753HE S7753HE	Rp,Fm,FF	2	H,R,A	OV/SO2/HCl CLO2/Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
421	Protech	1585S-G104-G208 1585-G104-G208 1585L-G104-G208			H,R,A	OV/SO2/HCl
421	Protech	1482-G104-G208 1482-S-G104-G208 1482-L-G104-G208	Rp,Fm,ON	2	H,R,A	OV/SO2/HCl
429	Survivair	3202-00 4202-00	Rp,Fm,FF	2		SO2/HCl
430	Survivair	2102-00 2202-00 2302-00	Rp,Fm,ON	2		SO2/HCl
431	Survivair	2112-00 2212-00 2312-00	Rp,Fm,ON	2	D,M	SO2/HCl
432	Survivair	3212-00 4212-00	Rp,Fm,FF	2	D,M	SO2/HCl
433	Survivair	2113-00 2213-00 2313-00	Rp,Fm,ON	2	D,M	OV/SO2/HCl CH2-O
434	Survivair	3213-00 4213-00	Rp,Fm,ON	2	D,M	OV/SO2/HCl CH2-O
443	3M	7202	Rp,Fm,ON	2		SO2/HCl
444	3M	7208	Rp,Fm,ON	2	D,M	SO2/HCl
445	3M	7213	Rp,Fm,ON	2	H,R,A	SO2/HCl
446	3M	7203	Rp,Fm,ON	2		OV/SO2/HCl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
447	3M	7209	Rp,Fm,ON	2	D,M	OV/SO2/HCl
448	3M	7214	Rp,Fm,ON	2	H,R,A	OV/SO2/HCl
449	North	7912	Es,M	1	D,M	SO2/HCl
450	Survivair	2193-00 2293-00 2393-00	Rp,Fm,ON	2	H,A	OV/SO2/HCl
451	Survivair	3293-00 4293-00	Rp,Fm,FF	2	H,A	OV/SO2/HCl
454	Survivair	3203-00 4203-00	Rp,Fm,FF	2		OV/SO2/HCl CH2-O
459	Protech	1482-G102-G208 1482-S-G102-G208 1482-L-G102-G208 1585S-G102-G208 1585-G102-G208 1585L-G102-G208	Rp,Fm,ON	2	H,R,A	SO2/HCl
461	MSA	472749	Rp,Bm,ON	2	D,M	SO2/HCl CH2-O
462	MSA	472750	Rp,Bm,ON	2	D,M	OV/SO2/HCl CH2-O
466	MSA	472756	Rp,Bm,ON	2	H,A	OV/SO2/HCl CH2-O
467	MSA	472757	Rp,Bm,ON	2	D,F,M,R	OV/SO2/HCl CH2-O
470	MSA	472760	Rp,Bm,ON	2	H,A	SO2/HCl CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
472	MSA	472764	Rp,Bm,ON	2	D,M	OV/SO2/HCl
479	Racal	BE1/B	PAPR,HH	3		HCl
480	Racal	BE5/B	PAPR,HH	3		HCl
481	Racal	BE6/B	PAPR,HH	3		HCl
487	Sellstrom	315-G102-G208*	Rp,Fm,ON	2	H,R,A	SO2/HCl
492	Scott	70-AG	Es,MP	1		HCl/H2S
496	Pulmosan	10411	Rp,Fm,FF	1		SO2/HCl
497	Pulmosan	10414	Rp,Fm,FF	1		OV/SO2/HCl
500	Pulmosan	10423	Rp,Fm,FF	1	D,M	SO2/HCl
501	Pulmosan	10426	Rp,Fm,FF	1	D,M	OV/SO2/HCl
511	MSA	469728	Rp,Fm,ON	1	D,M	OV/SO2/HCl CH2-O
512	MSA	469729	Rp,Fm,ON	1	D,M	OV/SO2/HCl CH2-O
514	MSA	471914 476337 476338	Es,MP	1	D,M	SO2/HCl H2S
516	Pirelli	4336.2023	Rp,Fm,ON	2		SO2/HCl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
517	Scott	64-AG-H 64E-AG-H 64M-AG-H 64ME-AG-H 64S-AG-H 64SE-AG-H	Rp,Fm,ON	2	H,R,A	SO2/HCl CH2-O
518	Scott	65-AG-H 65S-AG-H 65XL-AG-H	Rp,Fm,FF	2	H,R,A	SO2/HCl CH2-O
521	Scott	64-OA-H 64E-OA-H 64M-OA-H 64ME-OA-H 64S-OA-H 64SE-OA-H	Rp,Fm,ON	2	H,R,A	OV/SO2/HCl CH2-O
522	Scott	65-OA-H 65S-OA-H 65XL-OA-H	Rp,Fm,FF	2	H,R,A	OV/SO2/HCl CH2-O
525	Scott	64-TEDA-H 64E-TEDA-H 64M-TEDA-H 64ME-TEDA-H 64S-TEDA-H 64SE-TEDA-H	Rp,Fm,ON	2	H,R,A	
526	Scott	65-TEDA-H 65S-TEDA-H 65XL-TEDA-H	Rp,Fm,FF	2		
527	Pirelli	4333.2033	Rp,Fm,FF	2		SO2/HCl
532	Survivair	2143-00 2243-00 2343-00	Rp,Fm,ON	2	D,F,M,R	OV/SO2/HCl CH2-O
533	Survivair	3243-00 4243-00	Rp,Fm,FF	2	D,F,M,R	OV/SO2/HCl CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
534	Racal	BE3/BC BE7/BC	PAPR,FF	3		HCl
536	Safety Supply	F-200-AG F-160-AG F-800-AG	Rp,Fm,ON	2		SO2/HCl
537	Safety Supply	F-700-AG	Rp,Fm,FF	2		SO2/HCl
542	Safety Supply	F-200-OA F-160-OA F-800-OA	Rp,Fm,ON	2		OV/SO2/HCl
543	Safety Supply	F-700-OA	Rp,Fm,FF	2		OV/SO2/HCl
550	Safety Supply	F-160-AG-F-P F-200-AG-F-P F-800-AG-F-P	Rp,Fm,ON	2	D,M	SO2/HCl
551	Safety Supply	F-700-AG-F-P	Rp,Fm,FF	2	D,M	SO2/HCl
552	Safety Supply	F-160-OA-F-P F-200-OA-F-P F-800-OA-F-P	Rp,Fm,ON	2	D,M	SO2/HCl
553	Safety Supply	F-700-OA-F-P	Rp,Fm,FF	2	D,M	SO2/HCl
563	Willson	1525 1525R 1525SS	Rp,Fm,ON	2		OV/SO2/HCl
564	Willson	3525 3525R 3525SS	Rp,Fm,ON	2		OV/SO2/HCl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
565	Willson	1535 1535R 1535SS	Rp,Fm,ON	2		OV/SO2/HCl
577	Willson	152510 152510R 152510SS	Rp,Fm,ON	2	D,M	OV/SO2/HCl
578	Willson	352510 352510R 352510SS	Rp,Fm,ON	2	D,M	OV/SO2/HCl
583	Willson	153512 153512R 153512SS	Rp,Fm,ON	2	H,A	OV/SO2/HCl
584	Willson	353512 353512R 353512SS	Rp,Fm,ON	2	H,A	OV/SO2/HCl
587	AO	R4563A S4563A R5563A S5563A R6563A S6563A R55563A S55563A R65563A S65563A	Rp,Fm,ON	2	D,F,M	OV/SO2/HCl CLO2/Pest
588	AO	R7563A S7563A R77563A S77563A	Rp,Fm,FF	2	D,F,M	OV/SO2/HCl CLO2/Pest
593	Racal	BE1/E	PAPR,HH	3		SO2/HCl
594	Racal	BE3/EC BE7/EC	PAPR,FF	3		SO2/HCl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
595	Racal	BE5/E	PAPR,HH	3		SO2/HCl
596	Racal	BE6/E	PAPR,HH	3		SO2/HCl
597	Racal	BE1/EP3	PAPR,HH	3	H,R,A	SO2/HCl
598	Racal	BE3/EP3 BE7/EP3	PAPR,FF	3	H,R,A	SO2/HCl
599	Racal	BE5/EP3	PAPR,HH	3	H,R,A	SO2/HCl
600	Racal	BE6/EP3	PAPR,HH	1	H,R,A	SO2/HCl
601	AO	R9722A	Es,MP	1		SO2/HCl
603	Racal	BE17/P3	PAPR,HH	3	H,R,A	SO2/HCl
604	AO	R9722E	Es,MP	1		
605	Racal	BE1/AE	PAPR,HH	3		OV/SO2/HCl
606	Racal	BE3/AE BE7/AE	PAPR,FF	3		OV/SO2/HCl
607	Racal	BE5/AE	PAPR,HH	3		OV/SO2/HCl
608	Racal	BE6/AE	PAPR,HH	3		OV/SO2/HCl
610	Racal	BE8/B	PAPR,ON	3		HCl
613	Racal	BE8/E	PAPR,ON	3		SO2/HCl
614	Racal	BE8/EP3	PAPR,ON	3	H,R,A	SO2/HCl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
615	Racal	BE8/AE	PAPR,ON	3		OV/SO2/HCl
619	Glendale	GR-1622-50 GR-2022-50 GR-4022-50 GR-8022-50	Rp,Fm,ON	2	H,R,A	SO2/HCl
620	Glendale	GR-7022-50	Rp,Fm,FF	2	H,R,A	SO2/HCl
621	Glendale	GR-2023-50 GR-8023-50 GR-1623-50 GR-4023-50	Rp,Fm,ON	2	H,R,A	OV/SO2/HCl
622	Glendale	GR-7023-50	Rp,Fm,FF	2	H,R,A	OV/SO2/HCl
626	Neoterik	NP1562-7	PAPR	3		OV/SO2/HCl
627	Neoterik	NP1562-6	PAPR,ON	3		SO2/HCl
629	MSA	472959	Rp,Bm,ON	2		Mercury
631	Racal	BE4/B	PAPR,HH	3		HCl
634	Racal	BE4/E	PAPR,HH	3		SO2/HCl
635	Racal	BE4/EP3	PAPR,HH	3	H,R,A	SO2/HCl
636	Racal	BE4/AE	PAPR,HH	3		OV/SO2/HCl
638	Neoterik	NP1664-7 NP1564-7 1964-7	PAPR,FF	3		OV/SO2/HCl
640	Neoterik	NP1664-6 NP1564-6 1964-6	PAPR,FF	3		SO2/HCl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
647	Racal	BE3/AEP3 BE7/AEP3	PAPR,FF	3	H,R,A	OV/SO2/HCl
648	Racal	BE8/AEP3	PAPR,ON	3	H,R,A	OV/SO2/HCl
652	North	7592S,M,L 7792S,M,L	Rp,Fm,ON	2	D,F,M	SO2/HCl CH2-O
653	North	75BP92M 75BP92L	Rp,Bm,ON	2	D,F,M	SO2/HCl CH2-O
654	North	7692 7692S	Rp,Fm,FF	2	D,F,M	SO2/HCl CH2-O
655	North	7593S/M/L 7793S/M/L	Rp,Fm,ON	2	D,F,M	OV/SO2/HCl CH2-O
656	North	75BP93M 75BP93L	Rp,Bm,ON	2	D,F,M	OV/SO2/HCl CH2-O
657	North	7693 7693S	Rp,Fm,FF	2	D,F,M	OV/SO2/HCl CH2-O
664	Protech	1694-G104	Rp,Fm,FF	2		OV/SO2/HCl
665	Protech	1694-G104-F100	Rp,Fm,FF	2	D,M,Z	OV/SO2/HCl
670	Protech	1694-G104-G208	Rp,Fm,FF	2	H,R,A	OV/SO2/HCl
671	Protech	1694-G102	Rp,Fm,FF	2		SO2/HCl
673	Protech	1694-G102-G208	Rp,Fm,FF	2	H,R,A	SO2/HCl
678	Eastern	287	Rp,Fm,ON	2	H,R,A	OV/SO2/HCl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
679	AO	R7070A S7070A R7770A S7770A	Rp,Fm,FF	2		OV/SO2/HCl CLO2
680	Survivair	2195-00 2295-00 2395-00	Rp,ON	2	H,A	
681	Survivair	3295-00 4295-00	Rp,FF	2	H,A	
684	3M	7802 7802C 7802-L 7802-H	Rp,Fm,FF For 7802C Combination Type C, CF Air pressure (psig): 15 - 40; 17 - 45; 22 - 55; 25 - 70 Hose length (feet): 25 - 50; 75 - 100; 125 - 200; 225 - 300 Hose Length (ft) / Pressure Range (psig) 7802-H / 7802-L: 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0	2		SO2/HCl
685	3M	7803 7803C 7803-L 7803-H	Rp,Fm,FF For 7803C Combination Type C, CF Air pressure (psig): 15 - 40; 17 - 45; 22 - 55; 25 - 70 Hose length (feet): 25 - 50; 75 - 100; 125 - 200; 225 - 300 Hose Length (ft) / Pressure Range (psig) 7803-H / 7803-L: 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0	2		SO2/HCl OV

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
689	3M	7808 7808C 7808-L 7808-H	Rp,Fm,FF (For 7808C Combination Type C, CF Air pressure (psig) 15 - 40 17 - 45 22 - 55 25 - 70 Hose length (feet) 25 - 50 75 - 100 125 - 200 225 - 300	2	D,M	SO2/HCl
			Hose Length (ft) / Pressure Range (psig)			
			25	7808-H: 7.5 - 15.0	7808-L: 5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	
690	3M	7809 7809C 7809-L 7809-H	Rp,Fm,FF For 7809C Combination Type C, CF Air pressure (psig) 15 - 40 17 - 45 22 - 55 25 - 70 Hose length (feet) 25 - 50 75 - 100 125 - 200 225 - 300	2	D,M	SO2/HCl OV
			Hose Length (ft) / Pressure Range (psig)			
			25	7809-H: 7.5 - 15.0	7809-L: 5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	
694	3M	7813 7813C 7813-L 7813-H	Rp,Fm,FF For 7813C Combination Type C, CF Air pressure (psig) 15 - 40 17 - 45 22 - 55 25 - 70 Hose length (feet) 25 - 50 75 - 100 125 - 200 225 - 300	2	H,R,A	SO2/HCl
			Hose Length (ft) / Pressure Range (psig)			
			25	7813-H: 7.5 - 15.0	7813-L: 5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
695	3M	7814 7814C 7814-L 7814-H	Rp,Fm,FF For 7814C Combination Type C, CF Air pressure (psig): 15 - 40; 17 - 45; 22 - 55; 25 - 70 Hose length (feet): 25 - 50; 75 - 100; 125 - 200; 225 - 300 Hose Length (ft) / Pressure Range (psig) 7814-H / 7814-L: 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0	2	H,R,A	SO2/HCl OV
699	Willson	1226/R/S/SR/SS/SSS S1226/R/S/SR/SS/SSS	ON,Rp,Fm	2		SO2/HCl CH2-O
700	Willson	1626 1726	FF,Rp,Fm	2		SO2/HCl CH2-O
701	Willson	1526 1526R 1526SS	ON,Rp,Fm	2		SO2/HCl CH2-O
702	Willson	3026/R/S/SR/SS/SSS 3026/R/S/SR/SS/SSS	ON,Rp,Bm	2		SO2/HCl CH2-O
703	Willson	3126, 3226	FF,Bm,Rp	2		SO2/HCl CH2-O
704	Willson	3526 3526R 3526SS	ON,Bm,Rp	2		SO2/HCl CH2-O
705	Willson	122610/R/S/SR/SS/SSS S122610/R/S/SR/SS/SSS	ON,Rp,Fm	2	D,M	SO2/HCl CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
706	Willson	152610 152610R 152610SS	ON,Rp,Fm	2	D,M	SO2/HCl CH2-O
707	Willson	162610 172610	FF,Rp,Fm	2	D,M	SO2/HCl CH2-O
708	Willson	302610/R/S/SR/SS/SSS S302610/R/S/SR/SS/SSS	ON,Rp,Bm	2	D,M	SO2/HCl CH2-O
709	Willson	312610 322610	FF,Rp,Bm	2	D,M	SO2/HCl/ CH2-O
710	Willson	352610 352610R 352610SS	ON,Rp,Bm	2	D,M	SO2/HCl CH2-O
711	Willson	122617/R/S/SR/SS/SSS S122617/R/S/SR/SS/SSS	ON,Rp,Fm	2	D,F,M	SO2/HCl CH2-O
712	Willson	162617 172617	FF,Rp,Fm	2	D,F,M	SO2/HCl CH2-O
713	Willson	152617 152617R 152617SS	FF,Rp,Fm	2	D,F,M	SO2/HCl CH2-O
714	Willson	302617/R/S/SR/SS/SSS S302617/R/S/SR/SS/SSS	ON,Rp,Bm	2	D,F,M	SO2/HCl CH2-O
715	Willson	312617 322617	FF,Rp,Bm	2	D,F,M	SO2/HCl/ CH2-O
716	Willson	352617 352617R 352617SS	ON,Rp,Bm	2	D,F,M	SO2/HCl CH2-O

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
717	Willson	122517/R/S/SR/SS/SSS S122517/R/S/SR/SS/SSS	ON,Rp,Fm	2	D,F,M	SO2/HCl/OV
718	Willson	162517 172517	FF,Rp,Fm	2	D,F,M	SO2/HCl/OV
719	Willson	152517 152517R 152517SS	ON,Rp,Fm	2	D,F,M	SO2/HCl/OV
720	Willson	302517/R/S/SR/SS/SSS S302517/R/S/SR/SS/SSS	ON,Rp,Bm	2	D,F,M	SO2/HCl/OV
721	Willson	312517 322517	FF,Rp,Bm	2	D,F,M	SO2/HCl/OV
722	Willson	352517 352517R 352517SS	ON,Rp,Bm	2	D,F,M	SO2/HCl/OV
736	Willson	6105S 6105M 6105L	ON,Rp,Fm	2		OV/SO2/HCl
740	Willson	6205S 6205M 6205L	ON,Rp,Fm	1		OV/SO2/HCl
741	Willson	6106S 6106M 6106L	ON,Rp,Fm	2		SO2/HCl CH2-O
742	Willson	6206S 6206M 6206L	ON,Rp,Fm	1		SO2/HCl CH2-O

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
745	Willson	6405 S6405 6505 S6505	FF,Rp,Fm	2		SO2/HCl/OV
746	Willson	6406 S6406 6506 S6506	FF,Rp,Fm	2		SO2/HCl CH2-O
748	Willson	6415 S6415 6515 S6515	FF,Rp,Fm	2	DM	SO2/HCl/OV
749	Willson	6416 S6416 6516 S6516	FF,Rp,Fm	2	DM	SO2/HCl CH2-O
753	Willson	6115S 6115M 6115L	ON,Rp,Fm	2	DM	OV/SO2/HCl
754	Willson	6116S 6116M 6116L	ON,Rp,Fm	2	DM	SO2/HCl CH2-O
756	Willson	6215S 6215M 6215L	ON,Rp,Fm	1	DM	OV/SO2/HCl
754	Willson	6216S 6216M 6216L	ON,Rp,Fm	1	DM	SO2/HCl CH2-O
763	Willson	6145S 6145M 6145L	Rp,Fm,ON	2	HA	OV/SO2/HCl

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
764	Willson	6445 S6445 6545 S6545	Rp,Fm,FF	2	HA	OV/SO2/HCl
765	Willson	6146S 6146M 6146L	Rp,Fm,ON	2	HA	SO2/HCl CH2-O
766	Willson	6546 S6546 6446 S6446	Rp,Fm,FF	2	HA	SO2/HCl CH2-O
768	Scott	66STC-AG S66STC-AG 66MTC-AG S66MTC-AG 66LTC-AG S66LTC-AG	Fm,Rp,ON	2		SO2/HCl CH2-O
769	Scott	66STC-AG-D S66STC-AG-D 66MTC-AG-D S66MTC-AG-D 66LTC-AG-D S66LTC-AG-D	Fm,Rp,ON	2	DM	SO2/HCl CH2-O
770	Scott	66STC-AG-F S66STC-AG-F 66MTC-AG-F S66MTC-AG-F 66LTC-AG-F S66LTC-AG-F	Fm,Rp,ON	2	DFMR	SO2/HCl CH2-O
771	Scott	66STC-AG-H S66STC-AG-H 66MTC-AG-H S66MTC-AG-H 66LTC-AG-H S66LTC-AG-H	Fm,Rp,ON	2	HRA	SO2/HCl CH2-O

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
776	Scott	66STC-OA S66STC-OA 66MTC-OA S66MTC-OA 66LTC-OA S66LTC-OA	Fm,Rp,ON	2		SO2/HCl/OV CH2-O
777	Scott	66STC-OA-D S66STC-OA-D 66MTC-OA-D S66MTC-OA-D 66LTC-OA-D S66LTC-OA-D	Fm,Rp,ON	2	DM	SO2/HCl/OV CH2-O
778	Scott	66STC-OA-F S66STC-OA-F 66MTC-OA-F S66MTC-OA-F 66LTC-OA-F S66LTC-OA-F	Fm,Rp,ON	2	DFMR	SO2/HCl/OV CH2-O
779	Scott	66STC-OA-H S66STC-OA-H 66MTC-OA-H S66MTC-OA-H 66LTC-OA-H S66LTC-OA-H	Fm,Rp,ON	2	HRA	SO2/HCl/OV CH2-O
784	Scott	66STC-TEDA-H S66STC-TEDA-H 66MTC-TEDA-H S66MTC-TEDA-H 66LTC-TEDA-H S66LTC-TEDA-H	Rp,Fm,ON	2	HRA	
787	Willson	6125S 6125M 6125L	Rp,Fm,ON	2	DFMR	OV/SO2/HCl
788	Willson	6425 S6425 6525 S6525	Rp,Fm,FF	2	DFMR	OV/SO2/HCl

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
789	Willson	6126S 6126M 6126L	Rp,Fm,ON	2	DFMR	SO2/HCl CH2-O
790	Willson	6426 S6426 6526 S6526	Rp,Fm,FF	2	DFMR	SO2/HCl CH2-O
794	AO	S7553HE S7553HEC	FF,Rp,Fm	2 For S7557HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	HRA	SO2/HCl CLO2
798	AO	S7552A S7552AC	FF,Rp,Fm	2 For S7552AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		SO2/HCl
799	AO	S7553A S7553AC	FF,Rp,Fm	2 For S7553AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		OV/SO2/HCl CLO2
803	AO	S7552HE S7552HEC	FF,Rp,Fm	2 For S7552HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	H,R,A	SO2/HCl
805	AO	S7570A S7570AC	FF,Rp,Fm	2 For S7570AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		OV/SO2/HCl CLO2

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
808	AO	S7552AD S7552ADC	FF,Rp,Fm	2 For S7552ADC Comb. Type C, CF Hose Length feet: 25 - 300	D,M, Press. Range psig: 14 - 37	SO2/HCl CLO2
809	AO	S7553AD S7553ADC	FF,Rp,Fm	2 For S7553ADC Comb. Type C, CF Hose Length feet: 25 - 300	D,M, Press. Range psig: 14 - 37	OV/SO2/HCl CLO2
812	AO	S75563A S75563AC	FF,Rp,Fm	2 For S75563AC Comb. Type C, CF Hose Length feet: 25 - 300	D,F,M Press. Range psig: 14 - 37	OV/SO2/HCl CLO2
817	Glendale	GR9522	Rp,Fm,ON	2		SO2/HCl
818	Glendale	GR9522-10	Rp,Fm,ON	2	DM	SO2/HCl
819	Glendale	GR9522-50	Rp,Fm,ON	2	HRA	SO2/HCl
820	Glendale	GR9523	Rp,Fm,ON	2		OV/SO2/HCl
821	Glendale	GR9523-10	Rp,Fm,ON	2	DM	OV/SO2/HCl
822	Glendale	GR9523-50	Rp,Fm,ON	2	HRA	OV/SO2/HCl
828	Willson	6225S 6225M 6225L	Rp,Fm,ON	1	DFM	OV/SO2/HCl
829	Willson	6226S 6226M 6226L	Rp,Fm,ON	1	DFM	SO2/HCl CH2-O

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
832	MSA	484475	FF,Rp,Fm	2	DM	SO2/HCl CH2-O
				Comb. Hose Length feet 8 - 300	Type C, Pd Press. Range psig 65 - 85	
833	MSA	484476	FF,Rp,Fm	2	DM	OV/SO2/HCl CH2-O
				Comb. Hose Length feet 8 - 300	Type C, Pd Press. Range psig 65 - 85	
836	MSA	484480	FF,Rp,Fm	2	HA	SO2/HCl CH2-O
				Comb. Hose Length feet 8 - 300	Type C, Pd Press. Range psig 65 - 85	
837	MSA	484488	FF,Rp,Fm	2	DM	SO2/OV/HCl CH2-O
				Comb. Hose Length feet 8 - 300	Type C, Pd Press. Range psig 65 - 85	
840	MSA	484481	FF,Rp,Fm	2	HA	OV/SO2/HCl CH2-O
				Comb. Hose Length feet 8 - 300	Type C, Pd Press. Range psig 65 - 85	
843	MSA	483992	Rp,Fm,FF	2	DM	SO2/HCl CH2-O
				Comb. Hose Length (feet) 8-300	Type C, CF Press. Range psig 35 - 40	

CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
844	MSA	483993	Rp,Fm,FF	2	DM	OV/SO2/HCl CH2-O
				Comb. Hose Length (feet) 8-300	Type C, CF Pressure psig 35 - 40	
851	MSA	483997	Rp,Fm,FF	2	HA	SO2/HCl CH2-O
				Comb. Hose Length (feet) 8-300	Type C, CF Pressure psig 35 - 40	
852	MSA	484005	Rp,Fm,FF	2	DM	OV/SO2/HCl CH2-O
				Comb. Hose Length (feet) 8-300	Type C, CF Pressure psig 35 - 40	
853	MSA	483999	Rp,Fm,FF	2	DFMR	OV/SO2/HCl CH2-O
				Comb. Hose Length (feet) 8-300	Type C, CF Pressure psig 35 - 40	
854	MSA	483998	Rp,Fm,FF	2	HRA	OV/SO2/HCl CH2-O
				Comb. Hose Length (feet) 8-300	Type C, CF Pressure psig 35 - 40	

4. Hydrogen Chloride

Approval

Approved as respiratory protection against not more than 50 parts per million hydrogen chloride.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

E. Chemical Cartridges
4. Hydrogen Cloride

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
41	MSA	459434 461006	Rp,Fm,Bm, ON	2	DM	SO2/Cl CH2-O
47	MSA	459435 461007	Rp,Fm,Bm, ON	2	DM	OV/SO2/Cl CH2-O
60	AO	R4052* R5052* R6052*	Rp,Fm, ON	2		SO2/Cl
65	North	7503* 7503M 7703M 7503S 7703S 7503L 7703L	Rp,Fm, ON	2		OV/SO2/Cl CH2-O
66	North	7513* 7513M 7713M 7513S 7713S 7513L 7713L	Rp,Fm, ON	2	DM	OV/SO2/Cl CH2-O
76	Willson	1225 S1225 1225S S1225S 1225SR S1225SR S1225R S1225SS S1225SSS 1225SSS 1225R 1225SS	Rp,Fm, ON	2		OV/SO2/Cl

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
77	Willson	122510 122510R 122510S 122510SR 122510SS 122510SSS S122510 S122510R S122510S S122510SR S122510SS S122510SSS	Rp,Fm, ON	2	DM	OV/SO2/Cl
82	AO	R4053* R5053* R6053*	Rp,Fm, ON	2		OV/SO2/Cl
85	AO	R8153* S8153*	Rp,Fm, ON	1		OV/SO2/Cl
104	North	75BP03* 75BP03M 75BP03L	Rp,Bm, ON	2		OV/SO2/Cl CH2-O
105	North	75BP13* 75BP13M 75BP13L	Rp,Bm, ON	2	DM	OV/SO2/Cl CH2-O
111	AO	R9722	Es, M	1	DM	SO2/Cl
115	Scott	6411-0001* 6413-0001* 6421-0001* 6423-0001* 6412-0001* 6422-0001* 64-AG 64E-AG 64M-AG 64ME-AG 64S-AG 64SE-AG	Rp,Fm, ON	2		SO2/Cl CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
116	Scott	6411-0101* 6413-0101* 6421-0101* 6423-0101* 6412-0101* 6422-0101* G4-AG-D 64E-AG-D 64M-AG-D 64ME-AG-D 64S-AG-D 64SE-AG-D 64032-01*	Rp,Fm, ON	2	DM	SO2/Cl CH2-O
122	North	7542* 7542M*	Rp,Fm, ON	2	DMZ	SO2/Cl
129	3M	8714 8720	Su, ON	1	DM 8720 only	SO2/Cl
141	Willson	1625 1725	Rp,Fm, FF	2		OV/SO2/Cl
142	Willson	162510 172510	Rp,Fm, FF	2	DM	OV/SO2/Cl
145	MSA	461849 483481	Rp,Fm, FF	2	DM	SO2/Cl CH2-O
146	MSA	461850 483482	Rp,Fm, FF	2	DM	OV/SO2/Cl CH2-O
150	MSA	461854 483486	Rp,Fm, FF	2	HA	SO2/Cl CH2-O
153	MSA	461855 483487	Rp,Fm, FF	2	HA	OV/SO2/Cl CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
154	MSA	461856 483488	Rp,Fm, FF	2	DFMR	OV/SO2/Cl CH2-O
156	MSA	461835 462239	Rp,Fm,Bm, ON	2	HA	SO2/Cl CH2-O
159	MSA	460847 461013	Rp,Fm,Bm, ON	2	HA	OV/SO2/Cl CH2-O
160	MSA	460848 461014	Rp,Fm,Bm, ON	2	DFMR	OV/SO2/Cl CH2-O
163	Protech	1482-G104 1482-S-G104 1482-L-G104 1482-G104-F100 1482-S-G104-F100 1482-L-G104-F100 1585S-G104 1585-G104 1585L-G104 1585S-G104-F100 1585-G104-F100 1585L-G104-F100	Rp,Fm, ON	2	DMZ 1482-G-104-F100 only 1482-S-G104-F100 only 1482-L-G-104-F100 only	OV/SO2/Cl
163	Sellstrom	315-G104 315-G104-F100	Rp,Fm, ON	2	DMZ 315-G104-F100 only	OV/SO2/Cl
163	Eastern	E452	Rp,Fm, ON	2	DMZ	OV/SO2/Cl
164	Cesco	95RC55 95SMRC55	Fm, ON	2		SO2/Cl
165	Cesco	95RC75 95SMRC75	Rp,Fm, ON	2	DM	SO2/Cl
166	Cesco	95RC85 95SMRC85	Fm, ON	2		OV/SO2/Cl

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
167	Cesco	95RC105 95SMRC105	Rp,Fm, ON	2	DM	OV/SO2/Cl
168	US Safety	150T21 150L21	Fm, ON	2		SO2/Cl
169	US Safety	150T25 150L25	Rp,Fm, ON	2	DM	SO2/Cl
170	US Safety	150T26 150L26	Fm, ON	2		OV/SO2/Cl
171	US Safety	150T28 150L28	Rp,Fm, ON	2	DM	OV/SO2/Cl
172	Scott	6411-0015* 6412-Q015* 6413-0015* 6421-0015* 6422-0015* 6423-0015* 64-OA 64E-OA 64M-OA 64ME-OA 64S-OA 64SE-OA	Fm, ON	2		OV/SO2/Cl CH2-O
174	Scott	6411-0115* 6412-0115* 6413-0115* 6421-0115* 6422-0115* 6423-0115* 64-OA-D 64E-OA-D 64M-OA-D 64ME-OA-D 64S-OA-D 64SE-OA-D 604032-15*	Fm, ON	2	DM	OV/SO2/Cl CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
179	North	75BP42* 75BP42M*	Rp,Bm, ON	2	DMZ	SO2/Cl
181	North	7603 7603S 7603N* 7603SN*	Rp,Fm, FF	2		OV/SO2/Cl CH2-O
183	Glendale	GR-1622 GR-2022 GR-4022 GR-8022	Rp,Fm, ON	2		SO2/Cl
184	Glendale	GR-1622-10 GR-2022-10 GR-4022-10 GR-8022-10	Rp,Fm, ON	2	DM	SO2/Cl
186	North	7613 7613S 7613N* 7613SN*	Rp,Fm, FF	2	DM	OV/SO2/Cl CH2-O
189	North	7642* 7642S* 7642N* 7642SN*	Rp,Fm, FF	2	DMZ	SO2/Cl
203	Pulmosan	10012 10186 10240 10273	Rp,Fm, ON	1		SO2/Cl
207	North	7582M 7782M 7582S 7782S 7582L 7782L 7582*	Rp,Fm, ON	2	HRA	SO2/Cl CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
208	North	75BP82* 75BP82M 75BP82L	Rp,Bm, ON	2	HRA	SO2/Cl CH2-O
209	North	7682 7682S	Rp,Fm, FF	2	HRA	SO2/Cl CH2-O
210	North	7583M 7783M 7583S 7783S 7583L 7783L 7583*	Rp,Fm, ON	2	HRA	OV/SO2/Cl CH2-O
211	North	75BP83* 75BP83M 75BP83L	Rp,Bm, ON	2	HRA	OV/SO2/Cl CH2-O
212	North	7683S 7683	Rp,Fm, FF	2	HRA	OV/SO2/Cl CH2-O
216	3M	8725 8726	Su, ON	1	DM 8726 only	OV/SO2/Cl
218	Scott	6470-0101* 6480-0101* 65-AG-D 65S-AG-D 65XL-AG-D	Rp,Fm, FF	2	DM	SO2/Cl CH2-O
221	Scott	6470-0015* 6480-0015* 65-OA 65S-OA 65XL-OA	Rp,Fm, FF	2		OV/SO2/Cl CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
222	Scott	6470-0115* 6480-0115* 65-OA-D 65S-OA-D 65XL-OA-D	Rp,Fm, FF	2	DM	OV/SO2/Cl CH2-O
225	Scott	6470-0001 6480-0001 65-AG 65S-AG 65XL-AG	Rp,Fm, FF	2		SO2/Cl CH2-O
226	North	7502* 7502S 7702S 7502M 7702L 7502L 7702M	Rp,Fm, ON	2		SO2/Cl CH2-O
227	North	75BP02* 75BP02M 75BP02L	Rp,Bm, ON	2		SO2/Cl CH2-O
228	North	7602 7602S 7602N* 7602SN*	Rp,Fm, FF	2		SO2/Cl CH2-O
229	North	7512* 7512S 7512M 7512L 7712S 7712M 7712L	Rp,Fm, ON	2	DM	SO2/Cl CH2-O
230	North	75BP12* 75BP12M 75BP12L	Rp,Bm, ON	2	DM	SO2/Cl CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
231	North	7612 7612S 7612N* 7612SN*	Rp,Fm, FF	2	DM	SO2/Cl CH2-O
232	Pulmosan	10027 10201 10252 10285	Rp,Fm, ON	1	DM	SO2/Cl
233	AO	R7052*	Rp,Fm, FF	2		SO2/Cl
234	AO	R7053*	Rp,Fm, FF	2		OV/SO2/Cl
241	Glendale	GR-1623 GR-2023 GR-4023 GR-8023	Rp,Fm, ON	2		OV/SO2/Cl
242	Glendale	GR1623-10 GR2023-10 GR4023-10 GR8023-10	Rp,Fm, ON	2	DM	OV/SO2/Cl
246	Scott	6411-0301* 64-AG-F 6413-0301* 64E-AG-F 6421-0301* 64M-AG-F 6423-0301* 64ME-AG-F 6412-0301* 64S-AG-F 6422-0301* 64SE-AG-F	Rp,Fm, ON	2	DFMR	SO2/Cl CH2-O
247	Scott	6470-0301* 6480-0301* 65-AG-F 65S-AG-F 65XL-AG-F	Rp,Fm, FF	2	DFMR	SO2/Cl CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
250	Scott	6411-0315* 6412-0315* 6413-0315* 6421-0315* 6422-0315* 6423-0315* 64-OA-F 64M-OA-F 64ME-OA-F 64E-OA-F 64S-OA-F 64SE-OA-F	Rp,Fm, ON	2	DFMR	OV/SO2/Cl CH2-O
251	Scott	6470-0315* 6480-0315* 65-OA-F 65S-OA-F	Rp,Fm, FF	2	DFMR	OV/SO2/Cl CH2-O
260	MSA	466903	Rp,Fm, ON	2	DM	OV/SO2/Cl CH2-O
261	MSA	466902	Rp,Bm, ON	2	DM	OV/SO2/Cl CH2-O
262	MSA	466904 483494	Rp,Fm, FF	2	DM	OV/SO2/Cl CH2-O
265	Cesco	96RC75	Rp,Fm, FF	2	DM	SO2/Cl
266	US Safety	151T25	Rp,Fm, FF	2	DM	SO2/Cl
267	Cesco	96RC105	Rp,Fm, FF	2	DM	OV/SO2/Cl
268	US Safety	151T28	Rp,Fm, FF	2	DM	OV/SO2/Cl

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
281	AO	R4563 S4563 R5563 S5563 R6563 S6563	Rp,Fm, ON	2	DFM	OV/SO2/Cl Pest
282	AO	R7563 S7563	Rp,Fm, FF	2	DFM	OV/SO2/Cl Pest
288	North	7902	Es, M	1		SO2/Cl
298	Willson	1235 1235R 1235S 1235SR 1235SS 1235SSS S1235 S1235R S1235S S1235SR S1235SS S1235SSS	Rp, Fm, ON	2		OV/SO2/Cl
299	Willson	123512 123512R 123512S 123512SR 123512SS 123512SSS S123512 S123512R S123512S S123512SR S123512SS S123512SSS	Rp, FM, ON	2	HA	OV/SO2/Cl
300	Willson	1635 1735	Rp, FM, FF	2		OV/SO2/Cl
301	Willson	163512 173512	Rp, FM, FF	2	HA	OV/SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
306	Cesco	95RC50 95SMRC50	Rp, FM, ON	2	HRA	SO2/Cl
307	US Safety	150T41 150L41	Rp, FM, ON	2	HRA	SO2/Cl
308	Cesco	96RC50	Rp, FM, FF	2	HRA	SO2/Cl
309	US Safety	151T41	Rp, FM, FF	2	HRA	SO2/Cl
310	Cesco	95RC80 95SMRC80	Rp, FM, ON	2	HRA	OV/SO2/Cl
311	US Safety	150T46 150L46	Rp, FM, ON	2	HRA	OV/SO2/Cl
312	Cesco	96RC80	Rp, FM, FF	2	HRA	OV/SO2/Cl
313	US Safety	151T46	Rp, FM, FF	2	HRA	OV/SO2/Cl
318	Survivair	2203-00 2103-00 2303-00	Rp, FM, ON	2		OV/SO2/Cl
320	Pulmosan	10015 10189 10243 10276	Rp, FM, ON	1		OV/SO2/Cl
324	Pulmosan	10030 10255 10204 10288	Rp, FM, ON	1	DM	OV/SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
339	AO	R4052A S4052A R5052A S5052A R6052A S6052A R5552A S5552A R6552A S6552A	Rp,Fm, ON	2		SO2/Cl
340	AO	R7052A S7052A R7752A S7752A	Rp,Fm, FF	2		SO2/Cl
341	AO	R4052AD R5052AD R6052AD S4052AD S5052AD S6052AD R5552AD S5552AD R6552AD S6552AD	Rp,Fm, ON	2	DM	SO2/Cl
342	AO	R7052AD S7052AD R7752AD S7752AD	Rp,Fm, FF	2	DM	SO2/Cl
343	AO	R4053A S4053A R5053A S5053A R6053A S6053A R5553A S5553A R6553A S6553A	Rp,Fm, ON	2		OV/SO2/Cl CLO2

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
344	AO	R7053A S7053A R7753A S7753A	Rp,Bm, FF	2		OV/SO2/Cl CLO2
345	AO	R4053AD S4053AD R5053AD S5053AD R6053AD S6053AD R5553AD S5553AD R6553AD S6553AD	Rp,Fm, ON	2	DM	OV/SO2/Cl CLO2
346	AO	R7053AD S7053AD R7753AD S7753AD	Rp,Fm, FF	2	DM	OV/SO2/Cl CLO2
352	North	10003S 10003M	Su, ON	1		OV/SO2/Cl CH2-O
353	North	10002S 10002M	Su, ON	1		SO2/Cl CH2-O
356	North	10012S 10012M	Su, ON	1	DM	SO2/Cl CH2-O
357	North	10013S 10013M	Su, ON	1	DM	OV/SO2/Cl CH2-O
359	Protech	1482-G102 1482-S-G102 1482-L-G102 1585S-G102 1585-G102 1585L-G102	Rp,Fm, ON	2		SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
368	Willson	3025 3025S S3025 3025R S3025R 3025SR S3025S 3025SSS S3025SS S305SSS 3025SS 3025SR	Rp,Bm, ON	2		OV/SO2/Cl
369	Willson	3125 3225	Rp, Bm, FF	2		OV/SO2/Cl
370	Willson	3035 3035S S3035 3035R S3035S 3035SR S3035R S3035SR S3035SS S3035SSS 3035SS 3035SSS	Rp, Bm, ON	2		OV/SO2/Cl
371	Willson	3135 3235	Rp,Bm, FF	2		OV/SO2/Cl
380	Willson	302510 302510R 302510S 302510SR 302510SS 302510SSS S302510 S302510S S302510R S302510SR S302510SS S302510SSS	Rp,Bm, ON	2	DM	OV/SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
381	Willson	312510 322510	Rp,Bm, FF	2	DM	OV/SO2/Cl
386	Willson	303512 303512R 303512S 303512SR 303512SS 303512SSS S303512 S303512S S303512R S303512SR S303512SS S303512SSS	Rp,Bm, ON	2	HA	OV/SO2/Cl
387	Willson	313512 323512	Rp,Bm, FF	2	HA	OV/SO2/Cl
393	Survivair	2133-00* 2233-00* 2333-00*	Rp,Fm, ON	2	DFMR	OV/SO2/Cl
394	Survivair	3233-00*	Rp,Fm, FF	2	DFMR	OV/SO2/Cl
395	Survivair	2192-00 2292-00 2392-00	Rp,Fm, ON	2	HA	SO2/Cl
396	Survivair	3292-00 4292-00	Rp,Fm, FF	2	HA	SO2/Cl
407	Glendale	GR7022	Rp,Fm, FF	2		SO2/Cl
408	Glendale	GR7022-10	Rp,Fm, FF	2	DM	SO2/Cl
410	Glendale	GR7023	Rp,Fm, FF	2		OV/SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
411	Glendale	GR7023-10	Rp,Fm, FF	2	DM	OV/SO2/Cl
415	AO	R4052HE S4052HE R5052HE S5052HE R6052HE S6052HE R5552HE S5552HE R6552HE S6552HE	Rp,Fm, ON	2	HRA	SO2/Cl
416	AO	R7052HE S7052HE R7752HE S7752HE	Rp,Fm, FF	2	HRA	SO2/Cl
417	AO	R4053HE S4053HE R5053HE S5053HE R6053HE S6053HE R5553HE S5553HE R6553HE S6553HE	Rp,Fm, ON	2	HRA	SO2/Cl CLO2 Pest
418	AO	R7053HE S7053HE R7753HE S7753HE	Rp,Fm, FF	2	HRA	OV/SO2/Cl CLO2 Pest
421	Protech	1482-G104-G208 1482-S-G104-G208 1482-L-G104-G208 1585S-G104-G208 1585-G104-G208 1585L-G104-G208	Rp,Fm, ON	2	HRA	OV/SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
429	Survivair	3202-00 4202-00	Rp,Fm, FF	2		SO2/Cl
430	Survivair	2102-00 2202-00 2302-00	Rp,Fm, ON	2		SO2/Cl
431	Survivair	2112-00 2212-00 2312-00	Rp,Fm, ON	2	DM	SO2/Cl
432	Survivair	3212-00 4212-00	Rp,Fm, FF	2	DM	SO2/Cl
433	Survivair	2113-00 2213-00 2313-00	Rp,Fm, ON	2	DM	OV/SO2/Cl CH2-O
434	Survivair	3213-00 4213-00	Rp,Fm, ON	2	DM	OV/SO2/Cl CH2-O
443	3M	7202	Rp,Fm, ON	2		SO2/Cl
444	3M	7208	Rp,Fm, ON	2	DM	SO2/Cl
445	3M	7213	Rp,Fm, ON	2	HRA	SO2/Cl
446	3M	7203	Rp,Fm, ON	2		OV/SO2/Cl
447	3M	7209	Rp,Fm, ON	2	DM	OV/SO2/Cl
448	3M	7214	Rp,Fm, ON	2	HRA	OV/SO2/Cl
449	North	7912	Es, M	1	DM	SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
450	Survivair	2193-00 2293-00 2393-00	Rp,Fm, ON	2	HA	OV/SO2/Cl
451	Survivair	3293-00 4293-00	Rp,Fm, FF	2	HA	OV/SO2/Cl
454	Survivair	3203-00 4203-00	Rp,Fm, FF	2		OV/SO2/Cl CH2-O
459	Protech	1482-G102-G208 1482-S-G102-G208 1482-L-G102-G208 1585S-G102-G208 1585-G102-G208 1585L-G102-G208	Rp,Fm, ON	2	HRA	SO2/Cl
461	MSA	472749	Rp,Bm, ON	2	DM	SO2/Cl CH2-O
462	MSA	472750	Rp,Bm, ON	2	DM	OV/SO2/Cl CH2-O
466	MSA	472756	Rp,Bm, ON	2	HA	OV/SO2/Cl CH2-O
467	MSA	472757	Rp,Bm, ON	2	DFMR	OV/SO2/Cl CH2-O
470	MSA	472760	Rp,Bm, ON	2	HA	SO2/Cl CH2-O
472	MSA	472764	Rp,Bm, ON	2	DM	OV/SO2/Cl CH2-O
479	Racal	BE1/B	PAPR	3		Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
480	Racal	BE5/B	PAPR	3		Cl
481	Racal	BE6/B	PAPR	3		Cl
487	Sellstrom	315-G102-G208*	Rp,FM, ON	2	HRA	SO2/Cl
492	Scott	70-AG	ES, MP	1		Cl/H2S
496	Pulmosan	10411	Rp,FM, FF	1		SO2/Cl
497	Pulmosan	10414	Rp, FM, FF	1		OV/SO2/Cl
500	Pulmosan	10423	Rp, FM, FF	1	DM	SO2/Cl
501	Pulmosan	10426	Rp, FM, FF	1	DM	OV/SO2/Cl
511	MSA	469728	Rp,FM, ON	1	DM	OV/SO2/Cl CH2-O
512	MSA	469729	Rp,FM, ON	1	DM	OV/SO2/Cl CH2-O
514	MSA	471914 476337 476338	ES, MP	1	DM	SO2/Cl/H2S
516	Pirelli	4336.2023	Rp,FM, ON	2		SO2/Cl
517	Scott	64-AG-H 64E-AG-H 64M-AG-H 64ME-AG-H 64S-AG-H 64SE-AG-H	Rp,FM, ON	2	HRA	SO2/Cl CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
518	Scott	65-AG-H 65S-AG-H 65XL-AG-H	Rp,FM, FF	2	HRA	SO2/Cl CH2-O
521	Scott	64-OA-H 64E-OA-H 64M-OA-H 64ME-OA-H 64S-OA-H 64SE-OA-H	Rp,FM, ON	2	HRA	OV/SO2/Cl CH2-O
522	Scott	65-OA-H 65S-OA-H 65XL-OA-H	Rp,FM, FF	2	HRA	OV/SO2/Cl CH2-O
527	Pirelli	4333.2033	Rp,FM, FF	2		SO2/Cl
532	Survivair	2143-00 2243-00 2343-00	Rp,FM, ON	2	DFMR	OV/SO2/Cl CH2-O
533	Survivair	3243-00 4243-00	Rp,FM, FF	2	DFMR	OV/SO2/Cl CH2-O
534	Racal	BE3/BC BE7/BC	PAPR, FF	3		Cl
536	Safety Supply	F-200-AG F-160-AG F-800-AG	Rp,FM, ON	2		SO2/Cl
537	Safety Supply	F-700-AG	Rp,FM, FF	2		SO2/Cl
542	Safety Supply	F-200-OA F-160-OA F-800-OA	Rp,FM, ON	2		OV/SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
543	Safety Supply	F-700-OA	Rp,FM, FF	2		OV/SO2/Cl
550	Safety Supply	F-160-AG-F-P F-200-AG-F-P F-800-AG-F-P	Rp,FM, ON	2	DM	SO2/Cl
551	Safety Supply	F-700-AG-F-P	Rp,FM, FF	2	DM	SO2/Cl
552	Safety Supply	F-160-OA-F-P F-200-OA-F-P F-800-OA-F-P	Rp,FM, ON	2	DM	SO2/Cl
553	Safety Supply	F-700-OA-F-P	Rp,FM, FF	2	DM	OV/SO2/Cl
563	Willson	1525 1525R 1525SS	Rp,FM, ON	2		OV/SO2/Cl
564	Willson	3525 3525R 3525SS	Rp,FM, ON	2		OV/SO2/Cl
565	Willson	1535 1535R 1535SS	Rp,FM, ON	2		OV/SO2/Cl
566	Willson	3535 3535R 3535SS	Rp,FM, ON	2		OV/SO2/Cl
577	Willson	152510 152510R 152510SS	Rp,FM, ON	2	DM	OV/SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
578	Willson	352510 352510R 352510SS	Rp,FM, ON	2	DM	OV/SO2/Cl
583	Willson	153512 153512R 153512SS	Rp,FM, ON	2	HA	OV/SO2/Cl
584	Willson	353512 353512R 353512SS	Rp,FM, ON	2	HA	OV/SO2/Cl
587	AO	R4563A S4563A R5563A S5563A R6563A S6563A R55563A S55563A R65563A S65563A	Rp,FM, ON	2	DFM	OV/SO2/Cl CLO2/Pest
588	AO	R7563A S7563A R77563A S77563A	Rp,FM, FF	2	DFM	OV/SO2/Cl CLO2/Pest
593	Racal	BE1/E	PAPR, HH	3		SO2/Cl
594	Racal	BE3/EC BE7/EC	PAPR, FF	3		SO2/Cl
595	Racal	BE5/E	PAPR, HH	3		SO2/Cl
596	Racal	BE6/E	PAPR, HH	3		SO2/Cl
597	Racal	BE1/EP3	PAPR, HH	3	HRA	SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
598	Racal	BE3/EP3 BE 7/EP3	PAPR, FF	3	HRA	SO2/Cl
599	Racal	BE 5/EP3	PAPR, HH	3	HRA	SO2/Cl
600	Racal	BE6/EP3	PAPR, HH	1	HRA	SO2/Cl
601	AO	R9722A	ES, MP	1		SO2/Cl
603	Racal	BE17/P3	PAPR, HH	3	HRA	SO2/Cl
605	Racal	BE1/AE	PAPR, HH	3		OV/SO2/Cl
606	Racal	BE3/AE BE7/AE	PAPR, FF	3		OV/SO2/Cl
607	Racal	BE5/AE	PAPR, HH	3		OV/SO2/Cl
608	Racal	BE6/AE	PAPR, HH	3		OV/SO2/Cl
613	Racal	BE8/E	PAPR, ON	3		SO2/Cl
614	Racal	BE8/EP3	PAPR, ON	3	HRA	SO2/Cl
615	Racal	BE8/AE	PAPR	3		OV/SO2/Cl
619	Glendale	GR-1622-50 GR-2022-50 GR-4022-50 GR-8022-50	Rp,FM, ON	2	HRA	SO2/Cl
620	Glendale	GR-7022-50	Rp,FM, FF	2	HRA	SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
621	Glendale	GR-2023-50 GR-8023-50 GR-1623-50 GR-4023-50	Rp,FM, ON	2	HRA	OV/SO2/Cl
622	Glendale	GR-4023-50 GR-7023-50	Rp, Fm, FF	2	HRA	OV/SO2/Cl
626	Neoterik	NP1562-7	PAPR, ON	3		OV/SO2/Cl
627	Neoterik	NP1562-6	PAPR, ON	3		SO2/Cl
631	Racal	BE4/B	PAPR, HH	3		Cl
634	Racal	BE4/E	PAPR, HH	3		SO2/Cl
635	Racal	BE4/EP3	PAPR, HH	3	HRA	SO2/Cl
636	Racal	BE4/AE	PAPR, HH	3		OV/SO2/Cl
638	Neoterik	NP1664-7 NP1564-7	PAPR, FF	3		OV/SO2/Cl
640	Neoterik	NP1664-6 NP1564-6	PAPR, FF	3		SO2/Cl
647	Racal	BE3/AEP3 BE7/AEP3	PAPR, FF	3	HRA	OV/SO2/Cl
648	Racal	BE8/AEP3	PAPR, ON	3	HRA	OV/SO2/Cl
652	North	7592S,M,L 7792S,M,L	Rp,Fm, ON	2	DFM	SO2/Cl CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
653	North	75BP92M 75BP92L	Rp,BM, ON	2	DFM	SO2/Cl CH2-O
654	North	7692 7692S	Rp,Fm, FF	2	DFM	SO2/Cl CH2-O
655	North	7593S/M/L 7793S/M/L	Rp,Fm, ON	2	DFM	OV/SO2/Cl CH2-O
656	North	75BP93M 75BP93L	Rp,Bm, ON	2	DFM	OV/SO2/Cl CH2-O
657	North	7693 7693S	Rp,Fm, FF	2	DFM	OV/SO2/Cl CH2-O
664	Protech	1694-G104	Rp,Fm, FF	2		OV/SO2/Cl
665	Protech	1694-G104-F100	Rp,Fm, FF	2	DMZ	OV/SO2/Cl
670	Protech	1694-G104-G208	Rp,Fm, FF	2	HRA	OV/SO2/Cl
671	Protech	1694-G102	Rp,Fm, FF	2		SO2/Cl
673	Protech	1694-G102-G208	Rp;Fm, FF	2	HRA	SO2/Cl
678	Eastern	287	Rp, Fm, ON	2	HRA	OV/SO2/Cl
679	AO	R7070A S7070A R7770A S7770A	Rp, Fm, FF	2		OV/SO2/Cl CLO2

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
684	3M	7802 7802C 7802-L 7802-H	Rp, Fm, FF (For 7802C Combination Type C, CF)	2		SO2/Cl

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7802-H	Pressure Range (psig) 7802-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

685	3M	7803 7803C 7803-L 7803-H	Rp, Fm, FF (For 7803C Combination Type C, CF)	2		SO2/Cl OV

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7803-H	Pressure Range (psig) 7803-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

689	3M	7808 7808C 7808-L 7808-H	Rp, Fm, FF (For 7808C Combination Type C, CF)	2	DM	SO2/Cl

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7808-H	Pressure Range (psig) 7808-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
690	3M	7809 7809C	Rp, Fm, FF	2	DM	SO2/Cl OV

(For 7809C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7809-H	7809-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

694	3M	7813 7813C 7813-L 7813-H	Rp, Fm, FF	2	HRA	SO2/Cl

(For 7813C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7813-H	7813-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

695	3M	7814 7814C 7814-L 7814-H	Rp, Fm, FF	2	HRA	SO2/Cl OV

(For 7814C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7814-H	7814-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
699	Willson	1226/R/S/SR/SS/SSS S1226/R/S/SR/SS/SSS	ON, Rp, Fm	2		SO2/Cl/ CH2-O
700	Willson	1626, 1726	FF, Rp, Fm	2		SO2/Cl/ CH2-O
701	Willson	1526, 1526R 1526SS	ON, Rp, Fm	2		SO2/Cl CH2-O
702	Willson	3026S/R/S/SR/SS/SSS S3026/R/S/SR/SS/SSS	ON, Rp, Bm	2		SO2/Cl CH2-O
703	Willson	3126, 3226	FF, Bm, Rp	2		SO2/Cl CH2-O
704	Willson	3526, 3526R 3526SS	ON, Bm, Rp	2		SO2/Cl CH2-O
705	Willson	122610/R/S/SR/SS/SSS S122610/R/S/SR/SS/SSS	ON, Rp, Fm	2	DM	SO2/Cl CH2-O
706	Willson	152610 152610R 152610SS	ON, Rp, Fm	2	DM	SO2/Cl CH2-O
707	Willson	162610 172610	FF, Rp, Fm	2	DM	SO2/Cl CH2-O
708	Willson	302610/R/S/SR/SS/SSS S302610/R/S/SR/SS/SSS	ON, Rp, Bm	2	DM	SO2/Cl CH2-O
709	Willson	312610 322610	FF, Rp, Bm	2	DM	SO2/Cl/ CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
710	Willson	352610 352610R 352610SS	ON, Rp, Bm	2	DM	SO2/Cl/ CH2-O
711	Willson	122617/R/S/SR/SS/SSS S122617/R/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	SO2/Cl CH2-O
712	Willson	162617 172617	FF, Rp, Fm	2	DFM	SO2/Cl CH2-O
713	Willson	152617 152617R 152617SS	FF, Rp, Fm	2	DFM	SO2/Cl CH2-O
714	Willson	302617/R/S/SR/SS/SSS S302617/R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	SO2/Cl CH2-O
715	Willson	312617 322617	FF, Rp, Bm	2	DFM	SO2/Cl/ CH2-O
716	Willson	352617 352617R 352617SS	ON, Rp, Bm	2	DFM	SO2/Cl CH2-O
717	Willson	122517/R/S/SR/SS/SSS S122517/R/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	SO2/Cl/OV
718	Willson	162517 172517	FF, Rp, Fm	2	DFM	SO2/Cl/OV
719	Willson	152517 152517R 152517SS	ON, Rp, Fm	2	DFM	SO2/Cl/OV

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
720	Willson	302517/R/S/SR/SS/SSS S302517/R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	SO2/Cl/OV
721	Willson	312517 322517	FF, Rp, Bm	2	DFM	SO2/Cl/OV
722	Willson	352517 352517R 352517SS	ON, Rp, Bm	2	DFM	SO2/Cl/OV
736	Willson	6105S 6105M 6105L	ON,Rp,Fm	2		OV/SO2/Cl
740	Willson	6205S 6205M 6205L	ON,Rp,Fm	1		OV/SO2/Cl
741	Willson	6106S 6106M 6106L	ON,Rp,Fm	2		SO2/Cl CH2-0
742	Willson	6206S 6206M 6206L	ON,Rp,Fm	1		SO2/Cl CH2-0
745	Willson	6405 S6405 6505 S6505	FF,Rp,Fm	2		SO2/Cl/OV
746	Willson	6406 S6406 6506 S6506	FF,Rp,Fm	2		SO2/Cl CH2-0

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
748	Willson	6415 S6415 6515 S6515	FF,Rp,Fm	2	DM	SO2/Cl/OV
749	Willson	6416 S6416 6516 S6516	FF,Rp,Fm	2	DM	SO2/Cl CH2-O
753	Willson	6115S 6115M 6115L	ON,Rp,Fm	2	DM	OV/SO2/Cl
754	Willson	6116S 6116M 6116L	ON,Rp,Fm	2	DM	SO2/Cl CH2-O
756	Willson	6215S 6215M 6215L	ON,Rp,Fm	1	DM	OV/SO2/Cl
757	Willson	6216S 6216M 6216L	ON,Rp,Fm	1	DM	SO2/Cl CH2-O
763	Willson	6145S 6145M 6145L	Rp,Fm,ON	2	HA	OV/SO2/Cl
764	Willson	6445 S6445 6545 S6545	Rp,Fm,FF	2	HA	OV/SO2/Cl
765	Willson	6146S 6146M 6146L	Rp,Fm,ON	2	HA	SO2/Cl CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
766	Willson	6546 S6546 6446 S6446	Rp,Fm,FF	2	HA	SO2/Cl CH2-O
768	Scott	66STC-AG S66STC-AG 66MTC-AG S66MTC-AG 66LTC-AG S66LTC-AG	Fm,Rp,ON	2		SO2/Cl CH2-O
769	Scott	66STC-AG-D S66STC-AG-D 66MTC-AG-D S66MTC-AG-D 66LTC-AG-D S66LTC-AG-D	Fm,Rp,ON	2	DM	SO2/Cl CH2-O
770	Scott	66STC-AG-F S66STC-AG-F 66MTC-AG-F S66MTC-AG-F 66LTC-AG-F S66LTC-AG-F	Fm,Rp,ON	2	DFMR	SO2/Cl CH2-O
771	Scott	66STC-AG-H S66STC-AG-H 66MTC-AG-H S66MTC-AG-H 66LTC-AG-H S66LTC-AG-H	Fm,Rp,ON	2	HRA	SO2/Cl CH2-O
776	Scott	66STC-OA S66STC-OA 66MTC-OA S66MTC-OA 66LTC-OA S66LTC-OA	Fm,Rp,ON	2		SO2/Cl/OV CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
777	Scott	66STC-OA-D S66STC-OA-D 66MTC-OA-D S66MTC-OA-D 66LTC-OA-D S66LTC-OA-D	Fm,Rp,ON	2	DM	SO2/Cl/OV CH2-O
778	Scott	66STC-OA-F S66STC-OA-F 66MTC-OA-F S66MTC-OA-F 66LTC-OA-F S66LTC-OA-F	Fm,Rp,ON	2	DFMR	SO2/Cl/OV CH2-O
779	Scott	66STC-OA-H S66STC-OA-H 66MTC-OA-H S66MTC-OA-H 66LTC-OA-H S66LTC-OA-H	Fm,Rp,ON	2	HRA	SO2/Cl/OV CH2-O
787	Willson	6125S 6125M 6125L	Rp,Fm,ON	2	DFMR	OV/SO2/Cl
788	Willson	6425 S6425 6525 S6525	Rp,Fm,FF	2	DFMR	OV/SO2/Cl
789	Willson	6126S 6126M 6126L	Rp,Fm,ON	2	DFMR	SO2/Cl CH2-O
790	Willson	6426 S6426 6526 S6526	Rp,Fm,FF	2	DFMR	SO2/Cl CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
794	AO	S7553HE S7553HEC	FF,Rp,Fm	2 For S7557HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	HRA	SO2/Cl CLO2
798	AO	S7552A S7552AC	FF,Rp,Fm	2 For S7552AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		SO2/Cl
799	AO	S7553A S7553AC	FF,Rp,Fm	2 For S7553AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		OV/SO2/Cl CLO2
803	AO	S7552HE S7552HEC	FF,Rp,Fm	2 For S7552HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	HRA	SO2/Cl
805	AO	S7570A S7570AC	FF,Rp,Fm	2 For S7570AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		OV/SO2/Cl CLO2
808	AO	S7552AD S7552ADC	FF,Rp,Fm	2 For S7552ADC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	DM	SO2/Cl CLO2

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
809	AO	S7553AD S7553ADC	FF,Rp,Fm	2 For S7553ADC Comb. Type C, CF Hose Length feet: 25 - 300	DM Press. Range psig: 14 - 37	OV/SO2/Cl CLO2
812	AO	S75563A S75563AC	FF,Rp,Fm	2 For S75563AC Comb. Type C, CF Hose Length feet: 25 - 300	DFM Press. Range psig: 14 - 37	OV/SO2/Cl CLO2
817	Glendale	GR9522	Rp,Fm,ON	2		SO2/Cl
818	Glendale	GR9522-10	Rp,Fm,ON	2	DM	SO2/Cl
819	Glendale	GR9522-50	Rp,Fm,ON	2	HRA	SO2/Cl
820	Glendale	GR9523	Rp,Fm,ON	2		OV/SO2/Cl
821	Glendale	GR9523-10	Rp,Fm,ON	2	DM	OV/SO2/Cl
822	Glendale	GR9523-50	Rp,Fm,ON	2	HRA	OV/SO2/Cl
828	Willson	6225S 6225M 6225L	Rp,Fm,ON	1	DFM	OV/SO2/Cl
829	Willson	6226S 6226M 6226L	Rp,Fm,ON	1	DFM	SO2/Cl CH2-0

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
832	MSA	484475	FF,Rp,Fm	2	DM	SO2/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
833	MSA	484476	FF,Rp,Fm	2	DM	OV/SO2/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
836	MSA	484480	FF,Rp,Fm	2	HA	SO2/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
837	MSA	484488	FF,Rp,Fm	2	DM	SO2/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
839	MSA	484481	FF,Rp,Fm	2	HA	OV/SO2/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
843	MSA	483992	Rp,Fm,FF	2	DM	SO2/Cl CH2-O
				Comb. Type C, CF Hose Length (feet): 8-300 Press. Range psig: 35 - 40		

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
844	MSA	483993	Rp,Fm,FF	2	DM	OV/SO2/Cl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
851	MSA	483997	Rp,Fm,FF	2	HA	SO2/Cl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
852	MSA	484005	Rp,Fm,FF	2	DM	OV/SO2/Cl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
853	MSA	483999	Rp,Fm,FF	2	DFMR	OV/SO2/Cl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
854	MSA	483998	Rp,Fm,FF	2	HRA	OV/SO2/Cl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	

5. Sulfur Dioxide

Approval

Approved as respiratory protection against not more than 50 parts per million sulfur dioxide.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

E. Chemical Cartridges
5. Sulfur Dioxide

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
41	MSA	459434 461006	Rp,Fm,Bm, ON	2	DM	HCl/Cl/ CH2-O
47	MSA	459435 461007	Rp,Fm,Bm, ON	2	DM	OV/HCl/Cl CH2-O
60	AO	R4052* R5052* R6052*	Rp,Fm, ON	2		HCl/Cl
65	North	7503* 7503M 7703M 7503S 7703S 7503L 7703L	Rp,Fm, ON	2		OV/HCl/Cl
66	North	7513* 7513M 7713M 7513S 7713S 7513L 7713L	Rp,Fm, ON	2	DM	OV/HCl/Cl
76	Willson	1225 S1225 1225S S1225S 1225SR S1225SR S1225R S1225SS S1225SSS 1225SSS 1225R 1225SS	Rp,Fm, ON	2		OV/HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
77	Willson	122510 122510R 122510S 122510SR 122510SS 122510SSS S122510 S122510R S122510S S122510SR S122510SS S122510SSS	Rp,Fm, ON	2	DM	OV/HCl/Cl
82	AO	R4053* R5053* R6053*	Rp,Fm, ON	2		OV/HCl/Cl
85	AO	R8153 S8153	Rp,Fm, ON	1		OV/HCl/Cl
104	North	75BP03* 75BP03M 75BP03L	Rp,Bm, ON	2		OV/HCl/Cl
105	North	75BP13* 75BP13M 75BP13L	Rp,Bm, ON	2	DM	OV/HCl/Cl
111	AO	R9722	Es, M	1	DM	HCl/Cl
115	Scott	6411-0001* 6413-0001* 6421-0001* 6423-0001* 6412-0001* 6422-0001* 64-AG 64E-AG 64M-AG 64ME-AG 64S-AG 64SE-AG	Rp,Fm, ON	2		HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
116	Scott	6411-0101* 6413-0101* 6421-0101* 6423-0101* 6412-0101* 6422-0101* 64-AG-D 64E-AG-D 64M-AG-D 64ME-AG-D 64S-AG-D 64SE-AG-D 64032-01*	Rp,Fm, ON	2	DMZ	HCl/Cl CH2-O
122	North	7542* 7542M*	Rp,Fm, ON	2	DMZ	HCl/Cl
129	3M	8714 8720	Su, ON	1	DM 8720 only	HCl/Cl
141	Willson	1625 1725	Rp,Fm, FF	2		OV/HCl/Cl
142	Willson	162510 172510	Rp,Fm, FF	2	DM	OV/HCl/Cl
145	MSA	461849	Rp,Fm, FF	2	DM	HCl/Cl CH2-O
146	MSA	461850	Rp,Fm, FF	2	DM	OV/HCl/Cl CH2-O
150	MSA	461854	Rp,Fm, FF	2	HA	HCl/Cl CH2-O
153	MSA	461855	Rp,Fm, FF	2	HA	OV/HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
154	MSA	461856	Rp,Fm, FF	2	DFMR	OV/HCl/Cl CH2-O
156	MSA	461835 462239	Rp,Fm,Bm, ON	2	HA	HCl/Cl CH2-O
159	MSA	460847 461013	Rp,Fm,Bm, ON	2	HA	OV/HCl/Cl CH2-O
160	MSA	460848 461014	Rp,Fm,Bm, ON	2	DFMR	OV/HCl/Cl CH2-O
163	Protech	1482-G104 1482-S-G104 1482-L-G104 1482-G104-F100 1482-S-G104-F100 1482-L-G104-F100 1585S-G104 1585-G104 1585L-G104 1585S-G104-F100 1585-G104-F100 1585L-G104-F100	Rp,Fm, ON	2	DMZ 1482-G104-F100 1482-S-G104-F100 1482-L-G104-F100 1585-G104-F100 1585S-G104-F100 1585L-G104-F100 only	OV/HCl/Cl
163	Sellstrom	315-G104 315-G104-F100	Rp,Fm, ON	2	DMZ 315-G104-F100	OV/HCl/Cl
163	Eastern	E452	Rp,Fm, ON	2	DMZ	OV/HCl/Cl
164	Cesco	95RC55 95SMRC55	Fm, ON	2		OV/HCl/Cl
165	Cesco	95RC75 95SMRC75	Rp,Fm, ON	2	DM	HCl/Cl
166	Cesco	95RC85 95SMRC85	Fm, ON	2		OV/HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
167	Cesco	95RC105 95SMRC105	Rp,Fm, ON	2	DM	OV/HCl/Cl
168	US Safety	150T21 150L21	Fm, ON	2		HCl/Cl
169	US Safety	150T25 150L25	Rp,Fm, ON	2	DM	HCl/Cl
170	US Safety	150T26 150L26	Fm, ON	2		OV/HCl/Cl
171	US Safety	150T28 150L28	Rp,Fm, ON	2	DM	OV/HCl/Cl
172	Scott	6411-0015* 6412-0015* 6413-0015* 6421-0015* 6422-0015* 6423-0015* 64-OA 64E-OA 64M-OA 64ME-OA 64S-OA 64SE-OA	Fm, ON	2		OV/HCl/Cl CH2-O
174	Scott	6411-0115* 6412-0115* 6413-0115* 6421-0115* 6422-0115* 6423-0115* 64-OA-D 64E-OA-D 64M-OA-D 64ME-OA-D 64S-OA-D 64SE-OA-D 604032-15*	Fm, ON	2	DMZ	OV/HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
179	North	75BP42* 75BP42M*	Rp,Bm, ON	2	DMZ	HCl/Cl
181	North	7603 7603S 7603N* 7603SN*	Rp,Fm, FF	2		OV/HCl/Cl
183	Glendale	GR-1622 GR-2022 GR-4022 GR-8022	Rp,Fm, ON	2		HCl/Cl
184	Glendale	GR-1622-10 GR-2022-10 GR-4022-10 GR-8022-10	Rp,Fm, ON	2	DM	HCl/Cl
186	North	7613 7613S 7613N* 7613SN*	Rp,Fm, FF	2	DM	OV/HCl/Cl
189	North	7642* 7642S* 7642N* 7642SN*	Rp,Fm, FF	2	DMZ	HCl/Cl
203	Pulmosan	10012 10186 10240 10273	Rp,Fm, ON	1		HCl/Cl
207	North	7582M 7782M 7582S 7782S 7582L 7782L 7582*	Rp,Fm, ON	2	HRA	HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
208	North	75BP82* 75BP82M 75BP82L	Rp,Bm, ON	2	HRA	HCl/Cl CH2-O
209	North	7682 7682S	Rp,Fm, FF	2	HRA	HCl/Cl CH2-O
210	North	7583M 7783M 7583S 7783S 7583L 7783L 7583*	Rp,Fm, ON	2	HRA	OV/HCl/Cl
211	North	75BP83* 75BP83M 75BP83L	Rp,Bm, ON	2	HRA	OV/HCl/Cl
212	North	7683S 7683	Rp,Fm, FF	2	HRA	OV/HCl/Cl
216	3M	8725 8726	Su, ON	1	DM 8726 only	OV/HCl/Cl
218	Scott	6470-0101* 6480-0101* 65-AG-D 65S-AG-D	Rp,Fm, FF	2	DM	HCl/Cl CH2-O
221	Scott	6470-0015* 6480-0015* 65-OA 65S-OA	Rp,Fm, FF	2		OV/HCl/Cl CH2-O
222	Scott	6470-0115* 6480-0115* 65-OA-D 65S-OA-D	Rp,Fm, FF	2	DM	OV/HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
225	Scott	6470-0001 6480-0001 65-AG 65S-AG	Rp,Fm, FF	2		HCl/Cl CH2-O
226	North	7502* 7502S 7702S 7502M 7702L 7502L 7702M	Rp,Fm, ON	2		HCl/Cl CH2-O
227	North	75BP02* 75BP02M 75BP02L	Rp,Bm, ON	2		HCl/Cl CH2-O
228	North	7602 7602S 7602N* 7602SN*	Rp,Fm, FF	2		HCl/Cl CH2-O
229	North	7512* 7512S 7512M 7512L 7712S 7712M 7712L	Rp,Fm, ON	2	DM	HCl/Cl CH2-O
230	North	75BP12* 75BP12M 75BP12L	Rp,Bm, ON	2	DM	HCl/Cl CH2-O
231	North	7612 7612S 7612N* 7612SN*	Rp,Fm, FF	2	DM	HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
232	Pulmosan	10027 10201 10252 10285	Rp,Fm, ON	1	DM	HCl/Cl
233	AO	R7052*	Rp,Fm, FF	2		HCl/Cl
234	AO	R7053*	Rp,Fm, FF	2		OV/HCl/Cl
241	Glendale	GR-1623 GR-2023 GR-4023 GR-8023	Rp,Fm, ON	2		OV/HCl/Cl
242	Glendale	GR1623-10 GR2023-10 GR4023-10 GR8023-10	Rp,Fm, ON	2	DM	OV/HCl/Cl
246	Scott	6411-0301* 64-AG-F 6413-0301* 64E-AG-F 6421-0301* 64M-AG-F 6423-0301* 64ME-AG-F 6412-0301* 64S-AG-F 6422-0301* 64SE-AG-F	Rp,Fm, ON	2	DFMR	HCl/Cl CH2-O
247	Scott	6470-0301* 6480-0301* 65-AG-F 65S-AG-F	Rp,Fm, FF	2	DFMR	HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
250	Scott	6411-0315* 64-OA-F 6413-0315* 64M-OA-F 6421-0315* 64ME-OA-F 6423-0315* 64E-OA-F 6412-0315* 64S-OA-F 6422-0315* 64SE-OA-F	Rp,Fm, ON	2	DFMR	OV/HCl/Cl CH2-O
251	Scott	6470-0315* 6480-0315* 65-OA-F 65S-OA-F	Rp,Fm, FF	2	DFMR	OV/HCl/Cl CH2-O
260	MSA	466903	Rp,Fm, ON	2	DM	OV/HCl/Cl CH2-O
261	MSA	466902	Rp,Bm, ON	2	DM	OV/HCl/Cl CH2-O
262	MSA	466904	Rp,Fm, FF	2	DM	OV/HCl/Cl CH2-O
265	Cesco	96RC75	Rp,Fm, FF	2	DM	HCl/Cl
266	US Safety	151T25	Rp,Fm, FF	2	DM	HCl/Cl
267	Cesco	96RC105	Rp,Fm, FF	2	DM	OV/HCl/Cl
268	US Safety	151T28	Rp,Fm, FF	2	DM	OV/HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
281	AO	R4563 S4563 R5563 S5563 R6563 S6563	Rp,Fm, ON	2	DFM	OV/HCl/Cl Pest
282	AO	R7563 S7563	Rp,Fm, FF	2	DFM	OV/HCl/Cl Pest
288	North	7902	Es, M	1		HCl/Cl
298	Willson	1235 1235S S1235 1235SR S1235R S1235S S1235SS S1235SSS 1235SSS 1235R 1235SS 1235R	Rp, Fm, ON	2		OV/HCl/Cl
299	Willson	123512 S123512 123512S S123512R 123512SR S123512S S123512SS S123512SSS 123512SSS 123512R 123512SS S123512SR	Rp, FM, ON	2	HA	OV/HCl/Cl
300	Willson	1635 1735	Rp, FM, FF	2		OV/HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
301	Willson	163512 173512	Rp, FM, FF	2	HA	OV/HCl/Cl
306	Cesco	95RC50 95SMRC50	Rp, FM, ON	2	HRA	HCl/Cl
307	US Safety	150T41 150L41	Rp, FM, ON	2	HRA	HCl/Cl
308	Cesco	96RC50	Rp, FM, FF	2	HRA	HCl/Cl
309	US Safety	151T41	Rp, FM, FF	2	HRA	HCl/Cl
310	Cesco	95RC80 95SMRC80	Rp, FM, ON	2	HRA	OV/HCl/Cl
311	US Safety	150T46 150L46	Rp, FM, ON	2	HRA	OV/HCl/Cl
312	Cesco	96RC80	Rp, FM, FF	2	HRA	OV/HCl/Cl
313	US Safety	151T46	Rp, FM, FF	2	HRA	OV/HCl/Cl
318	Survivair	2203-00 2103-00 2303-00	Rp, FM, ON	2		OV/HCl/Cl CH2-O
320	Pulmosan	10015 10189 10243 10276	Rp, FM, ON	1		OV/HCl/Cl
324	Pulmosan	10030 10255 10204 10288	Rp, FM, ON	1	DM	OV/HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
339	AO	R4052A S4052A R5052A S5052A R6052A S6052A R5552A S5552A	Rp,Fm, ON	2		HCl/Cl
340	AO	R7052A S7052A R7752A S7752A	Rp,Fm, FF	2		HCl/Cl
341	AO	R4052AD R5052AD R6052AD S4052AD S5052AD S6052AD R5552AD S5552AD	Rp,Fm, ON	2	DM	HCl/Cl
342	AO	R7052AD S7052AD R7752AD S7752AD	Rp,Fm, FF	2	DM	HCl/Cl
343	AO	R4053A S4053A R5053A S5053A R6053A S6053A R5553A S5553A	Rp,Fm, ON	2		OV/HCl/Cl ClO2
344	AO	R7053A 57053A R7753A S7753A	Rp,Bm, FF	2		OV/HCl/Cl ClO2

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
345	AO	R4053AD S4053AD R5053AD S5053AD R6053AD S6053AD R5553AD S5553AD	Rp,Fm, ON	2	DM	OV/HCl/Cl ClO2
346	AO	R7053AD S7053AD R7753AD S7753AD	Rp,Fm, FF	2	DM	OV/HCl/Cl ClO2
352	North	10003S 10003M	Su, ON	1		OV/HCl/Cl
353	North	10002S 10002M	Su, ON	1		HCl/Cl
356	North	10012S 10012M	Su, ON	1	DM	HCl/Cl
357	North	10013S 10013M	Su, ON	1	DM	OV/HCl/Cl
359	Protech	1482-G102 1482-S-G102 1482-L-G102 1585S-G102 1585-G102 1585L-G102	Rp,Fm, ON	2		HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
368	Willson	3025 3025S S3025 3025R S3025R 3025SR S3025S 3025SSS S3025SS S305SSS 3025SS 3025SR	Rp,Bm, ON	2		OV/HCl/Cl
369	Willson	3125 3225	Rp, Bm, FF	2		OV/HCl/Cl
370	Willson	3035 3035S S3035 3035R S3035S 3035SR S3035R S3035SR S3035SS S3035SSS 3035SS 3035SSS	Rp, Bm, ON	2		OV/HCl/Cl
371	Willson	3135 3235	Rp,Bm, FF	2		OV/HCl/Cl
380	Willson	302510 S302510 302510R S302510S 302510S S302510R 302510SR S302510SR S302510SS S302510SSS 302510SS 302510SSS	Rp,Bm, ON	2	DM	OV/HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
381	Willson	312510 322510	Rp,Bm, FF	2	DM	OV/HCl/Cl
386	Willson	303512 303512R 303512S 303512SR 303512SS 303512SSS S303512 S303512S S303512R S303512SR S303512SS S303512SSS	Rp,Bm, ON	2	HA	OV/HCl/Cl
387	Willson	313512 323512	Rp,Bm, FF	2	HA	OV/HCl/Cl
393	Survivair	2133-00* 2233-00* 2333-00*	Rp,Fm, ON	2	DFMR	OV/HCl/Cl
394	Survivair	3233-00*	Rp,Fm, FF	2	DFMR	OV/HCl/Cl
395	Survivair	2192-00 2292-00 2392-00	Rp,Fm, ON	2	HA	HCl/Cl
396	Survivair	3292-00	Rp,Fm, FF	2	HA	HCl/Cl
407	Glendale	GR7022	Rp,Fm, FF	2		HCl/Cl
408	Glendale	GR7022-10	Rp,Fm, FF	2	DM	HCl/Cl
410	Glendale	GR7023	Rp,Fm, FF	2		OV/HCl/Cl
411	Glendale	GR7023-10	Rp,Fm, FF	2	DM	OV/HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
415	AO	R4052HE S4052HE R5052HE S5052HE R6052HE S6052HE R5552HE S5552HE R6552HE S6552HE	Rp,Fm, ON	2	HRA	HCl/Cl
416	AO	R7052HE S7052HE R7752HE S7752HE	Rp,Fm, FF	2	HRA	HCl/Cl
417	AO	R4053HE S4053HE R5053HE S5053HE R6053HE S6053HE R5553HE S5553HE R6553HE S6553HE	Rp,Fm, ON	2	HRA	OV/HCl/Cl ClO2/Pest
418	AO	R7053HE S7053HE R7753HE S7753HE	Rp,Fm, FF	2	HRA	OV/HCl/Cl ClO2/Pest
421	Protech	1482-G104-G208 1482-S-G104-G208 1482-L-G104-G208 1585S-G104-G208 1585-G104-G208 1585L-G104-G208	Rp,Fm, ON	2	HRA	OV/HCl/Cl
429	Survivair	3202-00 4202-00	Rp,Fm, FF	2		HCl/Cl
430	Survivair	2102-00 2202-00 2302-00	Rp,Fm, ON	2		HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
431	Survivair	2112-00 2212-00 2312-00	Rp,Fm, ON	2	DM	HCl/Cl
432	Survivair	3212-00 4212-00	Rp,Fm, FF	2	DM	HCl/Cl
433	Survivair	2113-00 2213-00 2313-00	Rp,Fm, ON	2	DM	OV/HCl/Cl CH2-O
434	Survivair	3213-00 4213-00	Rp,Fm, ON	2	DM	OV/HCl/Cl CH2-O
443	3M	7202	Rp,Fm, ON	2		HCl/Cl
444	3M	7208	Rp,Fm, ON	2	DM	HCl/Cl
445	3M	7213	Rp,Fm, ON	2	HRA	HCl/Cl
446	3M	7203	Rp,Fm, ON	2		OV/HCl/Cl
447	3M	7209	Rp,Fm, ON	2	DM	OV/HCl/Cl
448	3M	7214	Rp,Fm, ON	2	HRA	OV/HCl/Cl
449	North	7912	Es, M	1	DM	HCl/Cl
450	Survivair	2193-00 2293-00 2393-00	Rp,Fm, ON	2	HA	OV/HCl/Cl
451	Survivair	3293-00 4293-00	Rp,Fm, FF	2	HA	OV/HCl/Cl
454	Survivair	3203-00 4203-00	Rp,Fm, FF	2		OV/HCl/Cl CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
459	Protech	1482-G102-G208 1482-S-G102-G208 1482-L-G102-G208 1585S-G102-G208 1585-G102-G208 1585L-G102-G208	Rp,Fm, ON	2	HRA	HCl/Cl
461	MSA	472749	Rp,Bm, ON	2	DM	HCl/Cl CH2-O
462	MSA	472750	Rp,Bm, ON	2	DM	OV/HCl/Cl CH2-O
466	MSA	472756	Rp,Bm, ON	2	HA	OV/HCl/Cl CH2-O
467	MSA	472757	Rp,Bm, ON	2	DFMR	OV/HCl/Cl CH2-O
470	MSA	472760	Rp,Bm, ON	2	HA	HCl/Cl CH2-O
472	MSA	472764	Rp,Bm, ON	2	DM	OV/HCl/Cl CH2-O
487	Sellstrom	315-G102-G208*	Rp,FM, ON	2	HRA	HCl/Cl
496	Pulmosan	10411	Rp,FM, FF	1		HCl/Cl
497	Pulmosan	10414	Rp, FM, FF	1		OV/HCl/Cl
500	Pulmosan	10423	Rp, FM, FF	1	DM	HCl/Cl
501	Pulmosan	10426	Rp, FM, FF	1	DM	OV/HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
511	MSA	469728	Rp,FM, ON	1	DM	OV/HCl/Cl CH2-O
512	MSA	469729	Rp,FM, ON	1	DM	OV/HCl/Cl CH2-O
514	MSA	471914 476337 476338	ES, MP	1	DM	HCl/Cl H2S
516	Pirelli	4336.2023	Rp,FM, ON	2		HCl/Cl
517	Scott	64-AG-H 64E-AG-H 64M-AG-H 64ME-AG-H 64S-AG-H 64SE-AG-H	Rp,FM, ON	2	HRA	HCl/Cl CH2-O
518	Scott	65-AG-H 65S-AG-H 65XL-AG-H	Rp,FM, FF	2	HRA	HCl/Cl CH2-O
521	Scott	64-OA-H 64E-OA-H 64M-OA-H 64ME-OA-H 64S-OA-H 64SE-OA-H	Rp,FM, ON	2	HRA	OV/HCl/Cl CH2-O
522	Scott	65-OA-H 65S-OA-H 65XL-OA-H	Rp,FM, FF	2	HRA	OV/HCl/Cl CH2-O
527	Pirelli	4333.2033	Rp,FM, FF	2		HCl/Cl
532	Survivair	2143-00 2243-00 2343-00	Rp,FM, ON	2	DFMR	OV/HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
533	Survivair	3243-00 4243-00	Rp,FM, FF	2	DFMR	OV/HCl/Cl CH2-O
536	Safety Supply	F-200-AG F-160-AG F-800-AG	Rp,FM, ON	2		HCl/Cl
537	Safety Supply	F-700-AG	Rp,FM, FF	2		HCl/Cl
542	Safety Supply	F-200-OA F-160-OA F-800-OA	Rp,FM, ON	2		OV/HCl/Cl
543	Safety Supply	F-700-OA	Rp,FM, FF	2		OV/HCl/Cl
550	Safety Supply	F-160-AG-F-P F-200-AG-F-P F-800-AG-F-P	Rp,FM, ON	2	DM	HCl/Cl
551	Safety Supply	F-700-AG-F-P	Rp,FM, FF	2	DM	HCl/Cl
552	Safety Supply	F-160-OA-F-P F-200-OA-F-P F-800-OA-F-P	Rp,FM, ON	2	DM	HCl/Cl
553	Safety Supply	F-700-OA-F-P	Rp,FM, FF	2	DM	OV/HCl/Cl
563	Willson	1525 1525R 1525SS	Rp,FM, ON	2		OV/HCl/Cl
564	Willson	3525 3525R 3525SS	Rp,FM, ON	2		OV/HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
565	Willson	1535 1535R 1535SS	Rp,FM, ON	2		OV/HCl/Cl
566	Willson	3535 3535R 3535SS	Rp,FM, ON	2		OV/HCl/Cl
577	Willson	152510 152510R 152510SS	Rp,FM, ON	2	DM	OV/HCl/Cl
578	Willson	352510 352510R 352510SS	Rp,FM, ON	2	DM	OV/HCl/Cl
583	Willson	153512 153512R 153512SS	Rp,FM, ON	2	HA	OV/HCl/Cl
584	Willson	353512 353512R 353512SS	Rp,FM, ON	2	HA	OV/HCl/Cl
587	AO	R4563A S4563A R5563A S5563A R6563A S6563A R55563A S55563A R65563A S65563A	Rp,FM, ON	2	DFM	OV/HCl/Cl ClO2/Pest
588	AO	R7563A S7563A R77563A S77563A	Rp,FM, FF	2	DFM	OV/HCl/Cl ClO2/Pest
593	Racal	BE1/E	PAPR, HH	3		HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
594	Racal	BE3/EC BE7/EC	PAPR, FF	3		HCl/Cl
595	Racal	BE5/E	PAPR, HH	3		HCl/Cl
596	Racal	BE6/E	PAPR, HH	3		HCl/Cl
597	Racal	BE1/EP3	PAPR, HH	3	HRA	HCl/Cl
598	Racal	BE3/EP3 BE7/EP3	PAPR, FF	3	HRA	HCl/Cl
599	Racal	BE5/EP3	PAPR, HH	3	HRA	HCl/Cl
600	Racal	BE6/EP3	PAPR, HH	1	HRA	HCl/Cl
601	AO	R9722A	ES, MP	1		HCl/Cl
603	Racal	BE17/P3	PAPR, HH	3	HRA	HCl/Cl
605	Racal	BE1/AE	PAPR, HH	3		OV/HCl/Cl
606	Racal	BE3/AE BE7/AE	PAPR, FF	3		OV/HCl/Cl
607	Racal	BE5/AE	PAPR, HH	3		OV/HCl/Cl
608	Racal	BE6/AE	PAPR, HH	3		OV/HCl/Cl
613	Racal	BE8/E	PAPR, ON	3		HCl/Cl
614	Racal	BE8/EP3	PAPR, ON	3	HRA	HCl/Cl
615	Racal	BE8/AE	PAPR, ON	3		OV/HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
619	Glendale	GR-1622-50 GR-2022-50 GR-4022-50 GR-8022-50	Rp,FM, ON	2	HRA	Cl/HCl
620	Glendale	GR-7022-50	Rp,FM, FF	2	HRA	HCl/Cl
621	Glendale	GR-2023-50 GR-8023-50 GR-1623-50 GR-4023-50	Rp,FM, ON	2	HRA	OV/HCl/Cl
622	Glendale	GR-4023-50 GR-7023-50	Rp, Fm, FF	2	HRA	OV/HCl/Cl
626	Neoterik	NP1562-7	PAPR, ON	3		OV/HCl/Cl
627	Neoterik	NP1562-6	PAPR, ON	3		HCl/Cl
634	Racal	BE4/E	PAPR, HH	3		HCl/Cl
635	Racal	BE4/EP3	PAPR, HH	3	HRA	HCl/Cl
636	Racal	BE4/AE	PAPR, HH	3		OV/HCl/Cl
638	Neoterik	NP1664-7 NP1564-7 1964-7	PAPR, FF	3		OV/HCl/Cl
640	Neoterik	NP1664-6 NP1564-6 1964-6	PAPR, FF	3		HCl/Cl
647	Racal	BE3/AEP3 BE7/AEP3	PAPR, FF	3	HRA	OV/HCl/Cl
648	Racal	BE8/AEP3	PAPR, ON	3	HRA	OV/HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
652	North	7592S/M/L 7792S/M/L	Rp,Fm, ON	2	DFM	HCl/Cl CH2-O
653	North	75BP92M 75BP92L	Rp,BM, ON	2	DFM	HCl/Cl CH2-O
654	North	7692 7692S	Rp,Fm, FF	2	DFM	HCl/Cl CH2-O
655	North	7593S/M/L 7793S/M/L	Rp,Fm, ON	2	DFM	OV/HCl/Cl CH2-O
656	North	75BP93M 75BP93L	Rp,Bm, ON	2	DFM	OV/HCl/Cl CH2-O
657	North	7693 7693S	Rp,Fm, FF	2	DFM	OV/HCl/Cl CH2-O
664	Protech	1694-G104	Rp,Fm, FF	2		OV/HCl/Cl
665	Protech	1694-G104-F100	Rp,Fm, FF	2	DMZ	OV/HCl/Cl
670	Protech	1694-G104-G208	Rp,Fm, FF	2	HRA	OV/HCl/Cl
671	Protech	1694-G102	Rp,Fm, FF	2		HCl/Cl
673	Protech	1694-G102-G208	Rp,Fm, FF	2	HRA	HCl/Cl
678	Eastern	287	Rp, Fm, ON	2	HRA	OV/HCl/Cl
679	AO	R7070A S7070A R7770A S7770A	Rp, Fm, FF	2		OV/HCl/Cl ClO2

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
684	3M	7802 7802C 7802-L 7802-H	Rp, Fm, FF (For 7802C Combination Type C, CF)	2		Cl/HCl

Air pressure (psig)	Hose length (feet)
15 - 44	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7802-H	7802-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
685	3M	7803 7803C 7803-L 7803-H	Rp, Fm, FF (For 7803C Combination Type C, CF)	2		Cl/HCl/OV

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7803-H	7803-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
689	3M	7808 7808C	Rp, Fm, FF (For 7808C Combination Type C, CF)	2	DM	Cl/HCl

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7808-H	7808-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
690	3M	7809 7809C 7809-L 7809-H	Rp, Fm, FF	2	DM	Cl/HCl/ OV
			(For 7809C Combination Type C, CF)			
			Air pressure (psig)	Hose length (feet)		
			15 - 40	25 - 50		
			17 - 45	75 - 100		
			22 - 55	125 - 200		
			25 - 70	225 - 300		
			Hose Length (ft)	Pressure Range (psig) 7809-H	7809-L	
			25	7.5 - 15.0	5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	
694	3M	7813 7813C 7813-L 7813-H	Rp,Fm,FF	2	H,R,A	Cl/HCl
			For 7813C Combination Type C, CF			
			Air pressure (psig)	Hose length (feet)		
			15 - 40	25 - 50		
			17 - 45	75 - 100		
			22 - 55	125 - 200		
			25 - 70	225 - 300		
			Hose Length (ft)	Pressure Range (psig) 7813-H	7813-L	
			25	7.5 - 15.0	5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	
695	3M	7814 7814C 7814-L 7814-H	Rp,Fm,FF	2	H,R,A	Cl/HCl
			For 7814C Combination Type C, CF			
			Air pressure (psig)	Hose length (feet)		
			15 - 40	25 - 50		
			17 - 45	75 - 100		
			22 - 55	125 - 200		
			25 - 70	225 - 300		
			Hose Length (ft)	Pressure Range (psig) 7814-H	7814-L	
			25	7.5 - 15.0	5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
699	Willson	1226S/R/S/SR/SS/SSS S1226/R/S/SR/SS/SSS	ON, Rp, Fm	2		Cl/HCl/ CH2-O
700	Willson	1626, 1726	FF, Rp, Fm	2		Cl/HCl/ CH2-O
701	Willson	1526, 1526R 1526SS	ON, Rp, Fm	2		Cl/HCl CH2-O
702	Willson	3026S/R/S/SR/SS/SSS S3026/R/S/SR/SS/SSS	ON, Rp, Bm	2		Cl/HCl CH2-O
703	Willson	3126, 3226	FF, Bm, Rp	2		Cl/HCl CH2-O
704	Willson	3526, 3526R 3526SS	ON, Bm, Rp	2		Cl/HCl CH2-O
705	Willson	122610/R/S/SR/SS/SSS S122610/R/S/SR/SS/SSS	ON, Rp, Fm	2	DM	Cl/HCl CH2-O
706	Willson	152610 152610R 152610SS	ON, Rp, Fm	2	DM	Cl/HCl CH2-O
707	Willson	162610 172610	FF, Rp, Fm	2	DM	Cl/HCl CH2-O
708	Willson	302610/R/S/SR/SS/SSS S302610/R/S/SR/SS/SSS	ON, Rp, Bm	2	DM	Cl/HCl CH2-O
709	Willson	312610 322610	FF, Rp, Bm	2	DM	Cl/HCl/ CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
710	Willson	352610 352610R 352610SS	ON, Rp, Bm	2	DM	Cl/HCl/ CH2-O
711	Willson	122617/R/S/SR/SS/SSS S122617/R/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	Cl/HCl CH2-O
712	Willson	162617 172617	FF, Rp, Fm	2	DFM	Cl/HCl CH2-O
713	Willson	152617 152617R 152617SS	FF, Rp, Fm	2	DFM	Cl/HCl CH2-O
714	Willson	302617/R/S/SR/SS/SSS S302617/R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	Cl/HCl CH2-O
715	Willson	312617 322617	FF, Rp, Bm	2	DFM	Cl/HCl/ CH2-O
716	Willson	352617 352617R 352617SS	ON, Rp, Bm	2	DFM	Cl/HCl CH2-O
717	Willson	122517/R/S/SR/SS/SSS S122517/R/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	Cl/HCl/OV
718	Willson	162517 172517	FF, Rp, Fm	2	DFM	Cl/HCl/OV
719	Willson	152517 152517R 152517SS	ON, Rp, Fm	2	DFM	Cl/HCl/OV

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
720	Willson	302517/R/S/SR/SS/SSS S302517/R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	Cl/HCl/OV
721	Willson	312517 322517	FF, Rp, Bm	2	DFM	Cl/HCl/OV
722	Willson	352517 352517R 352517SS	ON, Rp, Bm	2	DFM	Cl/HCl/OV
736	Willson	6105S 6105M 6105L	ON,Rp,Fm	2		OV/Cl/HCl
740	Willson	6205S 6205M 6205L	ON,Rp,Fm	1		OV/Cl/HCl
741	Willson	6106S 6106M 6106L	ON,Rp,Fm	2		Cl/HCl CH2-O
742	Willson	6206S 6206M 6206L	ON,Rp,Fm	1		Cl/HCl CH2-O
745	Willson	6405 S6405 6505 S6505	FF,Rp,Fm	2		OV/Cl/HCl
746	Willson	6406 S6406 6506 S6506	FF,Rp,Fm	2		Cl/HCl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
748	Willson	6515 S6515 6415 S6415	FF,Rp,Fm	2	DM	OV/Cl/HCl
749	Willson	6516 S6516 6416 S6416	FF,Rp,Fm	2	DM	Cl/HCl CH2-O
753	Willson	6115S 6115M 6115L	ON,Rp,Fm	2	DM	OV/Cl/HCl
754	Willson	6116S 6116M 6116L	ON,Rp,Fm	2	DM	OV/Cl/HCl
756	Willson	6215S 6215M 6215L	ON,Rp,Fm	1	DM	OV/Cl/HCl
757	Willson	6216S 6216M 6216L	ON,Rp,Fm	1	DM	Cl/HCl CH2-O
763	Willson	6145S 6145M 6145L	Rp,Fm,ON	2	HA	OV/Cl/HCl
764	Willson	6445 S6445 6545 S6545	Rp,Fm,FF	2	HA	OV/Cl/HCl
765	Willson	6146S 6146M 6146L	Rp,Fm,ON	2	HA	Cl/HCl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
766	Willson	6546 S6546 6446 S6446	Rp,Fm,FF	2	HA	Cl/HCl CH2-O
768	Scott	66STC-AG S66STC-AG 66MTC-AG S66MTC-AG 66LTC-AG S66LTC-AG	Fm,Rp,ON	2		HCl/Cl CH2-O
769	Scott	66STC-AG-D S66STC-AG-D 66MTC-AG-D S66MTC-AG-D 66LTC-AG-D S66LTC-AG-D	Fm,Rp,ON	2	DM	HCl/Cl CH2-O
770	Scott	66STC-AG-F S66STC-AG-F 66MTC-AG-F S66MTC-AG-F 66LTC-AG-F S66LTC-AG-F	Fm,Rp,ON	2	DFMR	HCl/Cl CH2-O
771	Scott	66STC-AG-H S66STC-AG-H 66MTC-AG-H S66MTC-AG-H 66LTC-AG-H S66LTC-AG-H	Fm,Rp,ON	2	H,R,A	HCl/Cl CH2-O
776	Scott	66STC-OA S66STC-OA 66MTC-OA S66MTC-OA 66LTC-OA S66LTC-OA	Fm,Rp,ON	2		HCl/Cl/OV CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
777	Scott	66STC-OA-D S66STC-OA-D 66MTC-OA-D S66MTC-OA-D 66LTC-OA-D S66LTC-OA-D	Fm,Rp,ON	2	DM	HCl/Cl/OV CH2-O
778	Scott	66STC-OA-F S66STC-OA-F 66MTC-OA-F S66MTC-OA-F 66LTC-OA-F S66LTC-OA-F	Fm,Rp,ON	2	DFMR	HCl/Cl/OV CH2-O
779	Scott	66STC-OA-H S66STC-OA-H 66MTC-OA-H S66MTC-OA-H 66LTC-OA-H S66LTC-OA-H	Fm,Rp,ON	2	HRA	HCl/Cl/OV CH2-O
787	Willson	6125S 6125M 6125L	Rp,Fm,ON	2	DFMR	OV/Cl/HCl
788	Willson	6425 S6425 6525 S6525	Rp,Fm,FF	2	DFMR	OV/Cl/HCl
789	Willson	6126S 6126M 6126L	Rp,Fm,ON	2	DFMR	OV/Cl/HCl
790	Willson	6426 S6426 6526 S6526	Rp,Fm,FF	2	DFMR	OV/Cl/HCl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
794	AO	S7553HE S7553HEC	FF,Rp,Fm	2 For S7553HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	HRA	HCl/Cl CLO2
798	AO	S7552A S7552AC	FF,Rp,Fm	2 For S7552AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		Cl/HCl
799	AO	S7553A S7553AC	FF,Rp,Fm	2 For S7553AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		OV/HCl/Cl CLO2
803	AO	S7552HE S7552HEC	FF,Rp,Fm	2 For S7552HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	H,R,A	HCl/Cl
805	AO	S7570A S7570AC	FF,Rp,Fm	2 For S7570AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		OV/HCl/Cl CLO2
808	AO	S7552AD S7552ADC	FF,Rp,Fm	2 For S7552ADC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	D,M,	HCl/Cl CLO2

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
809	AO	S7553AD S7553ADC	FF,Rp,Fm	2 For S7553ADC Comb. Type C, CF Hose Length feet: 25 - 300	D,M, Press. Range psig: 14 - 37	OV/HCl/Cl CLO2
812	AO	S75563A S75563AC	FF,Rp,Fm	2 For S75563AC Comb. Type C, CF Hose Length feet: 25 - 300	D,F,M Press. Range psig: 14 - 37	OV/HCl/Cl CLO2
817	Glendale	GR9522	Rp,Fm,ON	2		HCl/Cl
818	Glendale	GR9522-10	Rp,Fm,ON	2	DM	HCl/Cl
819	Glendale	GR9522-50	Rp,Fm,ON	2	HRA	HCl/Cl
820	Glendale	GR9523	Rp,Fm,ON	2		OV/HCl/Cl
821	Glendale	GR9523-10	Rp,Fm,ON	2	DM	OV/HCl/Cl
822	Glendale	GR9523-50	Rp,Fm,ON	2	HRA	OV/HCL/CL
828	Willson	6225S 6225M 6225L	Rp,Fm,ON	1	DFM	OV/HCl/Cl
829	Willson	6226S 6226M 6226L	Rp,Fm,ON	1	DFM	HCl/Cl CH2-0

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
832	MSA	484475	FF,Rp,Fm	2	DM	HCl/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
833	MSA	484476	FF,Rp,Fm	2	DM	OV/HCl/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
836	MSA	484480	FF,Rp,Fm	2	HA	HCl/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
837	MSA	484488	FF,Rp,Fm	2	DM	HCl/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
839	MSA	484481	FF,Rp,Fm	2	HA	OV/HCl/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
843	MSA	483992	Rp,Fm,FF	2	DM	Cl/HCl CH2-O
				Comb. Type C, CF Hose Length (feet): 8-300 Press. Range psig: 35 - 40		

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
844	MSA	483993	Rp,Fm,FF	2	DM	OV/Cl/HCl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
851	MSA	483997	Rp,Fm,FF	2	HA	Cl/HCl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
852	MSA	484005	Rp,Fm,FF	2	DM	OV/Cl/HCl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
853	MSA	483999	Rp,Fm,FF	2	DFMR	OV/Cl/HCl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
854	MSA	483998	Rp,Fm,FF	2	HRA	OV/Cl/HCl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	

6. Organic Vapor

Approval

Approved as respiratory protection against not more than 1000 parts per million organic vapors by volume.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

Do not wear for protection against organic vapors with poor warning properties or those that generate high heats of reaction.

Maximum use concentrations will be lower than 1000 parts per million organic vapors where that concentration produces atmospheres immediately dangerous to life or health.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
40	MSA	459433 461005 460852	Rp,Fm,Bm, ON	2	DM	
49	North	7501* 7501S 7501M 7501L 7701S 7701M 7701L	Rp,Fm, ON	2		
50	Willson	1221 1221 1221R 1221S 1221SR 1221SS 1221SSS S1221 S1221R S1221S S1221SR S1221SS S1221SSS	Rp,Fm, ON	2		
51	Willson	122110 122110R 122110S 122110SR 122110SS 122110SSS S122110 S122110R S122110SSS S122110SS S122110S S122110SR	Rp,Fm, ON	2	DM	

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
52	Willson	122113 122113R 122113S 122113SR 122113SS 122113SSS S122113 S12213R S122113S S122113SR S122113SS S122113SSS	Rp,Fm, ON	2	DFM	
54	Willson	122115 122115R 122115S 122115SR 122115SS 122115SSS S122115 S122115R S122115S S122115SR S122115SS S122115SSS	Rp,Fm, ON	2	DM	PLE/Pest
56	AO	R4051* R5051* R6051*	Rp,Fm, ON	2		
59	DeVilbiss	MSE-502* MSE-502-1*	Rp,Fm, ON	2		
65	North	7503* 7503S 7503M 7503L 7703S 7703M 7703L	Rp,Fm, ON	2		SO2/HCl Cl/CH2-O

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
66	North	7513* 7513S 7513M 7513L 7713S 7713M 7713L	Rp,Fm, ON	2	DM	SO2/HCl Cl/CH2-O
73	North	7511* 7511S 7511M 7511L 7711S 7711M 7711L	Rp,Fm, ON	2	DM	
74	North	7549* 7549M 7549L 7749S 7749M 7749L	Rp, Fm, ON	2		Pest
75	North	7531* 7531M 7531S 7531L 7731S 7731M 7731L	Rp,Fm, ON	2		PLE
75	Acme	27*	Rp,Fm, ON	2		PLE
76	Willson	1225 S1225 1225S S1225S 1225SR S1225SR S1225R S1225SS S1225SSS 1225SSS 1225R 1225SS	Rp,Fm, ON	2		SO2/HCl Cl

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
77	Willson	122510 122510R 122510S 122510SS 122510SSS S122510 S122510R 122510SR S122510S S122510SS S122510SR S122510SSS	Rp,Fm, ON	2	DM	SO2/HCl Cl
79	MSA	448848 461009	Rp,Fm,Bm, ON	2	DM	PLE/Pest
80	MSA	448849 460853 462241 466249 466250 466251 466255 466528 466529 468015 468016 468017 468018 476726 476727 476728 479704 thru 479712 479714 thru 479722	Rp,Fm,Bm, ON	2	DM	PLE
81	Pulmosan	C256* 10009 10183 10219 10270	Rp,Fm, ON	1		
82	AO	R4053* R5053* R6053*	Rp,Fm, ON	2		SO2/HCl/ Cl

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
83	AO	R4055 S4055 R5055 S5055 R6055 S6055	Rp,Fm, ON	2	DM	
84	AO	R8151 S8151	Rp,Fm, ON	1		
85	AO	R8153* S8153*	Rp,Fm, ON	1		SO2/HCl Cl
86	Binks	40-129*	Rp,Fm, ON	2		
87	Binks	40-128 40-141 40-143 40-196 40-197 40-198	Rp,Fm, ON	2	DM	PLE
88	Glendale	GR1621 GR2021 GR4021 GR8021	Rp,Fm, ON	2		
89	Glendale	GR1621-10 GR2021-10 GR4021-10 GR8021-20	Rp,Fm, ON	2	DM	
90	Glendale	GR1621-20* GR1621-60 GR2021-20* GR2021-60 GR4021-20* GR4021-60 GR8021-20* GR8021-60	Rp,Fm, ON	2		PLE

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
91	Pulmosan	C259* 10024 10198 10222 10282	Rp,Fm, ON	1	DM	
92	AO	R8191P* S8191P*	Rp,Fm, ON	1	DM	PLE
93	AO	R8151P S8151P	Rp,Fm, ON	1	DM	PLE
94	AO	R4051P* R5051P* R6051P*	Rp,Fm, ON	2	DM	PLE
96	DeVilbiss	MSP-505* MSP-505-1*	Rp,Fm, ON	2	DM	PLE
97	AO	R4091P S4091P R5091P S5091P R6091P S6091P	Rp,Fm, ON	2	DM	PLE
99	Cesco	94R40*	Rp,Fm, ON	2		
100	Pulmosan	C-251* 10006 10180 10225 10267 11030	Rp,Fm, ON	1		PLE
100	Fibre Metal	C-251* 10180*	Rp,Fm, ON	1		PLE
100	Shoplyne	10006 10267 10180 10225	Rp,FM, ON	1		PLE

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
101	North	7401L* 7401M*	Rp,Fm, ON	1		
102	North	75BP01* 75BP01M 75BP01L	Rp,Bm, ON	2		
103	North	75BP11* 75BP11M 75BP11L	Rp,Bm, ON	2	DM	
104	North	75BP03* 75BP03M 75BP03L	Rp,Bm, ON	2		SO2/HCl Cl/CH2-O
105	North	75BP13* 75BP13M 75BP13L	Rp,Bm, ON	2	DM	SO2/HCl Cl/CH2-O
106	AO	R4058 S4058 R5058 S5058 R6058 S6058	Rp,Fm, ON	2	DFM	Pest
107	Protech	1482-G100 1482-L-G100 1482-S-G100 1585S-G100 1585-G100 1585L-G100	Rp,Fm, ON	2		
107	Sellstrom	315-G100	Rp,Fm, ON	2		
107	Eastern	E451	Rp,Fm, ON	2		
107	Safe-Tex	236-G100*	Rp,Fm, ON	2		
113	Scott	6411-0013* 6412-0013* 6413-0013* 6421-0013* 6422-0013*	Rp,Fm, ON	2		

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
113 Cont.		6423-0013* 64-OV 64E-OV 64M-OV 64ME-OV 64S-OV 64SE-OV				
114	Scott	6411-0113* 6412-0113* 6413-0113* 6421-0113* 6422-0113* 6423-0113* 64-OV-D 64E-OV-D 64M-OV-D 64ME-OV-D 64S-OV-D 64SE-OV-D	Rp,Fm, ON	2	DM	
117	Scott	6412-0313* 6422-0313* 6411-0313* 6413-0313* 6421-0313* 6423-0313* 64-OVP 64E-OVP 64M-OVP 64ME-OVP 64S-OVP 64SE-OVP	Rp,Fm, ON	2	DFMR	PLE/Pest
118	US Safety	150T20 150L20	Fm, ON	2		
119	Cesco	95RC25 95SMRC25	Fm, ON	2		
120	US Safety	150T23 150L23	Rp,Fm, ON	2	DM	

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
121	Cesco	95RC45 95SMRC45	Rp,Fm, ON	2	DM	
123	3M	8712 8734 8741 8751	Su, ON	1	DM 8734, 8741, 8751 only	PLE/Pest
124	Protech	1482-G100-F102 1482-S-G100-F102 1482-L-G100-F102 1585S-G100-F102 1585-G100-F102 1585L-G100-F102	Rp,Fm, ON	2		PLE
124	Eastern	E454	Rp,Fm, ON	2		PLE
124	Sellstrom	315-G100-F102	Rp,Fm, ON	2		PLE
124	Safe-Tex	236-G100-F102*	Rp,Fm, ON	2		PLE
125	US Safety	150T24	Rp,Fm, ON	2		PLE
126	Cesco	95RC35	Rp,Fm, ON	2		PLE
127	Stewart-Warner	7931*	Rp,Fm, ON	2		PLE
128	Northcott	70-450*	Rp,Fm, ON	2		PLE
130	Willson	1621 1721	Rp,Fm, FF	2		
131	Willson	162113 172113	Rp,Fm, FF	2	DMF	

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
133	Willson	162115 172115	Rp,Fm, FF	2	DM	PLE/Pest
134	Willson	162110 172110	Rp,Fm, FF	2	DM	
141	Willson	1625 1725	Rp,Fm, FF	2		SO2/HCl Cl
142	Willson	162510 172510	Rp,Fm, FF	2	DM	SO2/HCl Cl
144	MSA	461848 483480	Rp,Fm, FF	2	DM	
146	MSA	461850 483482	Rp,Fm, FF	2	DM	SO2/HCl CH2-O/Cl
149	MSA	461846 466256 466257 471726 471727 480386 480387 480388 483496	Rp,Fm, FF	2	DM	PLE
151	MSA	461852 483484	Rp,Fm, FF	2	DM	
153	MSA	461855 483487	Rp,Fm, FF	2	HA	SO2/HCl CH2-O/Cl
154	MSA	461856 483488	Rp,Fm, FF	2	DFMR	SO2/HCl CH2-O/Cl
155	MSA	461853 483485	Rp,Fm, FF	2	HA	PLE CH2-O/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
157	MSA	460965 462238	Rp,Fm,Bm, ON	2	DM	
159	MSA	460847 461013	Rp,Fm,Bm, ON	2	HA	SO2/HCl CH2-O/Cl
160	MSA	460848 461014	Rp,Fm,Bm, ON	2	DFMR	SO2/HCl CH2-O/Cl
161	MSA	460846 461012	Rp,Fm,Bm, ON	2	HA	PLE/Pest
163	Protech	1482-G104 1482-S-G104 1482-L-G104 1482-G104-F100 1482-S-G104-F100 1482-L-G104-F100 1585S-G104 1585-G104 1585L-G104 1585S-G104-F104 1585-G104-F104 1585L-G104-F104	Rp,Fm, ON	2	DMZ 1482-G104-F100 only 1482-S-G104-F100 only 1482-L-G104-F100 only 1585-G104-F100 only 1585S-G104-F100 only 1585L-G104-F100 only	SO2/HCl Cl
163	Sellstrom	315-G104 315-G104-F100	Rp,Fm, ON	2	DMZ	SO2/HCl Cl
163	Eastern	E452	Rp,Fm, ON	2	DMZ	SO2/HCl Cl
166	Cesco	95RC85 95SMRC85	Fm, ON	2		SO2/HCl Cl
167	Cesco	95RC105 95SMRC105	Rp,Fm, ON	2	DM	SO2/HCl Cl
170	US Safety	150T26 150L26	Fm, ON	2		SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
171	US Safety	150T28 150L28	Rp,Fm, ON	2	DM	SO2/HCl Cl
172	Scott	6411-0015* 6412-0015* 6413-0015* 6421-0015* 6422-0015* 6423-0015* 64-OA 64E-OA 64M-OA 64ME-OA 64S-OA 64SE-OA 604032-15*	Fm, ON	2		SO2/HCl CH2-O/Cl
174	Scott	6411-0115* 6412-0115* 6413-0115* 6421-0115* 6422-0115* 6423-0115* 64-OA-D 64E-OA-D 64M-OA-D 64ME-OA-D 64S-OA-D 64SE-OA-D	Fm, ON	2	DM	SO2/HCl CH2-O/Cl
175	North	75BP31* 75BP31M 75BP31L	Rp,Bm, ON	2		PLE
178	North	75BP49* 75BP49M 75BP49L	Rp, Bm, ON	2		Pest
180	North	7601 7601S 7601N* 7601SN*	Rp,Fm, FF	2		

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
181	North	7603 7603S 7603N* 7603SN*	Rp,Fm, FF	2		SO2/HCl Cl/CH2-O
185	North	7611 7611S 7611N* 7611SN*	Rp,Fm, FF	2	DM	
186	North	7613 7613S 7613N* 7613SN*	Rp,Fm, FF	2	DM	SO2/HCl Cl/CH2-O
188	North	7631 7631S 7631N* 7631SN*	Rp,Fm, FF	2		PLE
190	North	7649 7649S 7649N* 7649SN*	Rp, Fm, FF	2		Pest
196	3M	8723 8724	Su, ON	1	DM 8724 only	Cl
198	US Safety	150T30*	Fm, ON	2		Pest
199	Cesco	95RC125*	Fm, ON	2		Pest
201	MSA	465986 466239 466240 466241 466526 466527	Rp,Fm, ON	2	DM	PLE

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
202	Protech	1482-G100-F104 1482-S-G100-F104 1482-L-G100-F104 1585S-G100-F104 1585-G100-F104 1585L-G100-F104	Rp,Fm, ON	2	DM	Pest
202	Eastern	E455	Rp,Fm, ON	2	DM	PLE
202	Sellstrom	315-G100-F104	Rp,Fm, ON	2	DM	PLE
204	North	7581M 7781M 7581S 7781S 7581L 7781L 7581*	Rp,Fm, ON	2	HRA	PLE
205	North	75BP81* 75BP81M 75BP81L	Rp,Bm, ON	2	HRA	PLE
206	North	7681 7681S	Rp,Fm, FF	2	HRA	PLE
210	North	7583M 7783M 7583S 7783S 7583L 7783L 7583*	Rp,Fm, ON	2	HRA	SO2/HCl Cl/CH2-O
211	North	75BP83* 75BP83M 75BP83L	Rp,Bm, ON	2	HRA	SO2/HCl Cl/CH2-O
212	North	7683S 7683	Rp,Fm, FF	2	HRA	SO2/HCl Cl/CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
216	3M	8725 8726	Su, ON	1	DM 8726 only	SO2/HCl Cl
219	Scott	6470-0013* 6480-0013* 65-OV 65S-OV 65XL-OV	Rp,Fm, FF	2		
220	Scott	6470-0113* 6480-0113* 65-OV-D 65S-OV-D 65XL-OV-D	Rp,Fm, FF	2	DM	
221	Scott	6470-0015* 6480-0015* 65-OA 65S-OA 65XL-OA	Rp,Fm, FF	2		SO2/HCl CH2-O/Cl
222	Scott	6470-0115* 6480-0115* 65-OA-D 65S-OA-D 65XL-OA-D	Rp,Fm, FF	2	DM	SO2/HCl CH2-O/Cl
224	Scott	6470-0313* 6480-0313* 65-OVP 65S-OVP 65XL-OVP	Rp, Fm, FF	2	DFMR	PLE/Pest
234	AO	R7053*	Rp,Fm, FF	2		SO2/HCl Cl
236	AO	R7051*	Rp,Fm, FF	2		
237	AO	R7055 S7055	Rp,Fm, FF	2	DM	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
238	AO	R7058 S7058	Rp,Fm, FF	2	DMF	Pest
239	AO	R7051P*	Rp,Fm, FF	2		PLE
240	AO	R7091P S7091P	Rp,Fm, FF	2	DM	PLE
241	Glendale	GR-1623 GR-2023 GR-4023 GR-8023	Rp,Fm, ON	2		SO2/HCl Cl
242	Glendale	GR1623-10 GR2023-10 GR4023-10 GR8023-10	Rp,Fm, ON	2	DM	SO2/HCl Cl
243	MSA	466165	Rp,Fm, ON	2	HA	
244	MSA	466163	Rp,Bm, ON	2	HA	
245	MSA	466164 483493	Rp,Fm, FF	2	HA	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
250	Scott	6411-0315* 6412-0315* 6413-0315* 6421-0315* 6422-0315* 6423-0315* 64-OA-F 64M-OA-F 64ME-OA-F 64E-OA-F 64S-OA-F 64SE-OA-F	Rp,Fm, ON	2	DFMR	SO2/HCl CH2-O/Cl
251	Scott	6470-0315* 6480-0315* 65-OA-F 65S-OA-F 65XL-OA-F	Rp,Fm, FF	2	DFMR	SO2/HCl CH2-O/Cl
258	Willson	122116 122116R 122116S 122116SR 122116SS 122116SSS S122116 S122116R S122116S S122116SS S122116SSS S122116SR	Rp,Fm, ON	2	DM	PLE
259	Willson	162116 172116	Rp,Fm, FF	2	DM	PLE
260	MSA	466903	Rp,Fm, ON	2	DM	SO2/HCl CH2-O/Cl
261	MSA	466902	Rp,Bm, ON	2	DM	SO2/HCl CH2-O/Cl
262	MSA	466904 483494	Rp,Fm, FF	2	DM	SO2/HCl CH2-O/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
263	Cesco	96RC45	Rp,Fm, FF	2	DM	
264	US Safety	151T23	Rp,Fm, FF	2	DM	
267	Cesco	96RC105	Rp,Fm, FF	2	DM	SO2/HCl Cl
268	US Safety	151T28	Rp,Fm, FF	2	DM	SO2/HCl Cl
271	Cesco	96RC35*	Rp,Fm, FF	2		PLE
272	US Safety	151T24*	Rp,Fm, FF	2		PLE
275	Protech	1482-G100-F108 1482-S-G100-F108 1482-L-G100-F108	Rp,Fm, ON	2	DFM	
276	Protech	1482-G100-F100 1482-S-G100-F100 1482-L-G100-F100	Rp,Fm, ON	2	DM	
277	DeVilbiss	MSP-507	Rp,Fm, ON	1		
278	DeVilbiss	MSP-506	Rp,Fm, ON	1	DM	PLE
281	AO	R4563 S4563 R5563 S5563 R6563 S6563	Rp,Fm, ON	2	DFM	SO2/HCl ClO2/Pest Cl
282	AO	R7563 S7563	Rp,Fm, FF	2	DFM	SO2/HCl ClO2/Pest Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
285	MSA	468023 468024 468025 471728 471729	Rp, FM, FF	2	DM	PLE
286	MSA	468026 468027 468028 468029 468030 468031	Rp, BM, ON	2	DM	PLE
287	Survivair	2101-00 2301-00 2201-00	Rp, FM, ON	2		
293	Willson	1231 1231R 1231S 1231SR 1231SS 1231SSS S1231 S1231R S1231S S1231SR S1231SS S1231SSS	Rp, FM, ON	2		
294	Willson	123112 123112R 123112S 123112SR 123112SS 123112SSS S123112 S123112R S123112S S123112SR S123112SS S123112SSS	Rp, FM, ON	2	HA	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
295	Willson	1631 1731	Rp, FM, FF	2		
296	Willson	163112 173112	Rp, FM, FF	2	HA	
297	3M	8729	SU, ON	1		
298	Willson	1235 1235R 1235S 1235SR 1235SSS 1235SS S1235 S1235R S1235S S1235SR S1235SS S1235SSS	Rp, Fm, ON	2		SO2/HCl Cl
299	Willson	123512 123512R 123512S 123512SR 123512SS 123512SSS S123512 S123512R S123512S S123512SR S123512SS S123512SSS	Rp, FM, ON	2	HA	SO2/HCl Cl
300	Willson	1635 1735	Rp, FM, FF	2		SO2/HCl Cl
301	Willson	163512 173512	Rp, FM, FF	2	HA	SO2/HCl Cl
302	Cesco	95RC20 95SMRC20	Rp, FM, ON	2	HRA	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
303	US Safety	150T40 150L40	Rp, FM, ON	2	HRA	
304	Cesco	96RC20	Rp,FM, FF	2	HRA	
305	US Safety	151T40	Rp, FM, FF	2	HRA	
310	Cesco	95RC80 95SMRC80	Rp, FM, ON	2	HRA	SO2/HCl Cl
311	US Safety	150T46 150L46	Rp, FM, ON	2	HRA	SO2/HCl Cl
312	Cesco	96RC80	Rp, FM, FF	2	HRA	SO2/HCl Cl
313	US Safety	151T46	Rp, FM, FF	2	HRA	SO2/HCl Cl
318	Survivair	2203-00 2103-00 2303-00	Rp, FM, ON	2		SO2/HCl CH2-O/Cl
320	Pulmosan	10015 10189 10243 10276	Rp, FM, ON	1		SO2/HCl Cl
321	Survivair	2221-00 2121-00 2321-00	Rp, FM, ON	2	DM	PLE
322	Survivair	2211-00 2111-00 2311-00	Rp, FM , ON	2	DM	
323	Survivair	2131-00* 2231-00* 2331-00*	Rp, FM, ON	2	DFMR	Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
324	Pulmosan	10030 10255 10204 10288	Rp, FM, ON	1	DM	SO2/HCl Cl
325	AO	R4051A S4051A R5051A S5061A R6051A S6051A R5551A S5551A R6551A S6551A	Rp, FM , ON	2		
326	AO	R7051A S7051A R7751A S7751A	Rp, FM , FF	2		
327	AO	R4051AD S4051AD R5051AD S5051AD R6051AD S6051AD R5551AD S5551AD R6551AD S6551AD	Rp, FM, ON	2	DM	
328	AO	R7051AD S7051AD R7751AD S7751AD	Rp, FM, FF	2	DM	
333	AO	R4051AP S4051AP R5051AP S5051AP R6051AP	Rp, FM, ON	2	DM	PLE

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
333 Cont.		S6051AP R5551AP S5551AP R6551AP S6551AP				
334	AO	R7051AP S7051AP R7751AP S7751AP	Rp, FM, FF	2	DM	PLE
335	DeVilbiss	MSP-508 MSP-9508	Rp, FM, ON	2	DM	PLE
336	US Safety	150T35 150L35	Rp,Fm, ON	2	DFMR	PLE/Pest
337	Cesco	95RC115 95SMRC115	Rp,Fm, ON	2	DFMR	PLE/Pest
338	US Safety	151T35	Rp,Fm, FF	2	DFMR	PLE/Pest
343	AO	R4053A S4053A R5053A S5053A R6053A S6053A R5553A S5553A R6553A S6553A	Rp,Fm, ON	2		SO2/HCl ClO2/Cl
344	AO	R7053A 57053A R7753A S7753A	Rp,Bm, FF	2		SO2/HCl ClO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
345	AO	R4053AD S4053AD R5053AD S5053AD R6053AD S6053AD R5553AD S5553AD R6553AD S6553AD	Rp,Fm, ON	2	DM	SO2/HCl ClO2/Cl
346	AO	R7053AD S7053AD R7753AD S7753AD	Rp,Fm, FF	2	DM	SO2/HCl ClO2/Cl
348	Cesco	96RC115	Rp,Fm, FF	2	DFM	PLE/Pest
349	North	10001S 10001M	Su, ON	1		
351	Survivair	3201-00 4201-00	Rp,Fm, FF	2		
352	North	10003S 10003M	Su, ON	1		SO2/HCl Cl/CH2-O
354	North	10041S 10041M	Su, ON	1	DM	PLE/Pest
355	North	10011S 10011M	Su, ON	1	DM	
357	North	10013S 10013M	Su, ON	1	DM	SO2/HCl Cl/CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
360	Willson	3021 3021R 3021S 3021SR 3021SS 3021SSS S3021 S3021S S3021R S3021SR S3021SS S3021SSS	Rp,Bm, ON	2		
361	Willson	3121 3221	Rp, Bm, FF	2		
362	Willson	3031 3031R 3031S 3031SR 3031SS 3031SSS S3031 S3031R S3031S S3031SR S3031SS S3031SSS	Rp, Bm, ON	2		
363	Willson	3131 3231	Rp, Bm, FF	2		
368	Willson	3025 3025R 3025S 3025SR 3025SS 3025SSS S3025 3025R S3025R S3025S S3025SS S305SSS	Rp,Bm, ON	2		SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
369	Willson	3125 3225	Rp, Bm, FF	2		SO2/HCl Cl
370	Willson	3035 3035R 3035S 3035SR 3035SS 3035SSS S3035 S3035S S3035R S3035SR S3035SS S3035SSS	Rp, Bm, ON	2		SO2/HCl Cl
371	Willson	3135 3235	Rp,Bm, FF	2		SO2/HCl Cl
373	Stewart Warner	7931+	Rp, Fm, ON	2	DFMR	PLE/Pest
374	Willson	302115 302115R 302115S 302115SR 302115SS 302115SSS S302115 S302115R S302115S S302115SR S302115SS S302115SSS	Rp, Bm, ON	2	DM	PLE/Pest
375	Willson	312115 322115	Rp, Bm, FF	2	DM	PLE/Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
376	Willson	302116 302116R 302116S 302116SR 302116SS 302116SSS S302116 S302116R S302116S S302116SR S302116SS S302116SSS	Rp, Bm, ON	2	DM	PLE
377	Willson	312116 322116	Rp, Bm, FF	2	DM	PLE
380	Willson	302510 302510R 302510S 302510SR 302510SS 302510SSS S302510 S302510R S302510S S302510SR S302510SS S302510SSS	Rp,Bm, ON	2	DM	SO2/HCl Cl
381	Willson	312510 322510	Rp,Bm, FF	2	DM	SO2/HCl Cl
382	Willson	303112 S303112 303112R S303112R 303112S S303112S 303112SR S303112SR S303112SS S303112SSS 303112SS 303112SSS	Rp,Bm, ON	2	HA	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
383	Willson	313112 323112	Rp,Bm, FF	2	HA	
386	Willson	303512 303512R 303512S 303512SR 303512SS 303512SSS S303512 S303512S S303512R S303512SR S303512SS S303512SSS	Rp,Bm, ON	2	HA	SO2/HCl Cl
387	Willson	313512 323512	Rp,Bm, FF	2	HA	SO2/HCl Cl
388	Willson	312110 322110	Rp,Fm, FF	2	DM	
389	Willson	302110 302110R 302110S 302110SR 302110SS 302110SSS S302110 S302110R S302110S S302110SR S302110SS S302110SSS	Rp,Bm, ON	2	DM	
390	Willson	312113 322113	Rp,Bm, FF	2	DFM	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
391	Willson	302113 302113R 302113S 302113SR 302113SS 302113SSS S302113 S302113S S302113R S302113SR S302113SS S302113SSS	Rp,Bm, ON	2	DFM	
392	Northcott	70-450+	Rp,Fm, ON	2	DFMR	PLE/Pest
393	Survivair	2133-00* 2233-00* 2333-00*	Rp,Fm, ON	2	DFMR	SO2/HCl Cl
394	Survivair	3233-00*	Rp,Fm, FF	2	DFMR	SO2/HCl Cl
404	Glendale	GR7021	Rp,Fm, FF	2		
405	Glendale	GR7021-10	Rp,Fm, FF	2	DM	
406	Glendale	GR7021-20 GR7021-60	Rp,Fm, FF	2		PLE
410	Glendale	GR7023	Rp,Fm, FF	2		SO2/HCl Cl
411	Glendale	GR7023-10	Rp,Fm, FF	2	DM	SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
413	AO	R4051HE S4051HE R5051HE S5051HE R6051HE S6051HE R5551HE S5551HE R6551HE S6551HE	Rp,Fm, ON	2	HRA	Pest/PLE
414	AO	R7051HE S7051HE R7751HE S7751HE	Rp,Fm, FF	2	HRA	Pest/PLE
417	AO	R4053HE S4053HE R5053HE S5053HE R6053HE S6053HE R5553HE S5553HE R6553HE S6553HE	Rp,Fm, ON	2	HRA	SO2/HCl ClO2/Pest Cl
418	AO	R7053HE S7053HE R7753HE S7753HE	Rp,Fm, FF	2	HRA	SO2/HCl ClO2/Pest Cl
421	Protech	1482-G104-G208 1482-S-G104-G208 1482-L-G104-G208 1585S-G104-G208 1585-G104-G208 1585L-G104-G208	Rp,Fm, ON	2	HRA	SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
424	AO	R4051E R5051E R6051E	Rp,Fm, ON	2		
425	AO	R7051E	Rp,Fm, FF	2		
426	AO	R4051EP R5051EP R6051EP	Rp,Fm, ON	2	DMZ	PLE
427	AO	R7051EP	Rp,Fm, FF	2	DMZ	PLE
428	DeVilbiss	MSL-500	Rp,Fm, ON	2	DMZ	PLE
433	Survivair	2113-00 2213-00 2313-00	Rp,Fm, ON	2	DM	SO2/HCl CH2-O/Cl
434	Survivair	3213-00 4213-00	Rp,Fm, ON	2	DM	SO2/HCl CH2-O/Cl
435	3M	7201	Rp,Fm, ON	2		
436	3M	7210	Rp,Fm, ON	2	DM	PLE
437	3M	7207	Rp,Fm, ON	2	DM	
438	3M	7212	Rp,Fm, ON	2	HRA	
446	3M	7203	Rp,Fm, ON	2		SO2/HCl Cl
447	3M	7209	Rp,Fm, ON	2	DM	SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
448	3M	7214	Rp,Fm, ON	2	HRA	SO2/HCl Cl
450	Survivair	2193-00 2293-00 2393-00	Rp,Fm, ON	2	HA	SO2/HCl Cl
451	Survivair	3293-00 4293-00	Rp,Fm, FF	2	HA	SO2/HCl Cl
452	Survivair	2191-00 2291-00 2391-00	Rp,Fm, ON	2	HA	
453	Survivair	3291-00 4291-00	Rp,Fm, FF	2	HA	
454	Survivair	3203-00 4203-00	Rp,Fm, FF	2		SO2/HCl CH2-O/Cl
455	Survivair	3221-00 4221-00	Rp,Fm, FF	2	DM	PLE
456	Survivair	3231-00*	Rp,Fm, FF	2	DFMR	Pest
458	Protech	1482-G100-G208 1482-L-G100-G208 1482-S-G100-G208 1585S-G100-G208 1585-G100-G208 1585L-G100-G208	Rp,Fm, ON	2	HRA	
460	MSA	472748	Rp,Bm, ON	2	DM	
462	MSA	472750	Rp,Bm, ON	2	DM	SO2/HCl CH2-O/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
464	MSA	472752	Rp,Bm, ON	2	DM	Pest
465	MSA	472755	Rp,Bm, ON	2	HA	PLE/Pest
466	MSA	472756	Rp,Bm, ON	2	HA	SO2/HCl CH2-O/Cl
467	MSA	472757	Rp,Bm, ON	2	DFMR	SO2/HCl CH2-O/Cl
469	MSA	472759	Rp,Bm, ON	2	DM	
471	MSA	472761	Rp,Bm, ON	2	HA	
472	MSA	472764	Rp,Bm, ON	2	DM	SO2/HCl CH2-O/Cl
473	MSA	472736 472737 472738 479926 thru 479931	Rp,Bm, ON	2	DM	PLE
474	MSA	472739 472740 472741 480055 thru 480063	Rp,Bm, ON	2	DM	PLE
476	Racal	BE1/A	PAPR, HH	3		
477	Racal	BE5/A	PAPR, HH	3		
478	Racal	BE6/A	PAPR, HH	3		
482	Racal	BE1/A-P3	PAPR, HH	3	HRA	Pest

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
483	Racal	BE3/A-P3 BE7/A-P3	PAPR, FF	3	HRA	Pest
484	Racal	BE5/A-P3	PAPR, HH	3	HRA	Pest
485	Racal	BE6/A-P3	PAPR, HH	3	HRA	Pest
488	AO	R4055A S4055A R5055A S5055A R6055A S6055A R5555A S5555A R6555A S6555A	Rp,FM, ON	2	DM	
489	AO	R7055A S7055A R7755A S7755A	Rp,FM, FP	2	DM	
490	AO	R4091AP S4091AP R5091AP S5091AP R6091AP S6091AP R5591AP S5591AP R6591AP S6591AP	Rp,FM, ON	2	DM	PLE
491	AO	R7091AP S7091AP R7791AP S7791AP	Rp,FM, FF	2	DM	PLE
494	Pulmosan	10405	Rp,FM, FF	1		PLE
495	Pulmosan	10408	Rp,FM, FF	1		

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
497	Pulmosan	10414	Rp, FM, FF	1		SO2/HCl Cl
499	Pulmosan	10420	Rp,FM, FF	1	DM	
501	Pulmosan	10426	Rp, FM, FF	1	DM	SO2/HCl Cl
504	Pirelli	4336.2021	Rp,FM, ON	2		
509	MSA	469727	Rp,FM, ON	1		
510	MSA	470200	Rp,FM, ON	1	DM	PLE
512	MSA	469729	Rp,FM, ON	1	DM	SO2/HCl CH2-O/Cl
521	Scott	64-OA-H 64E-OA-H 64M-OA-H 64ME-OA-H 64S-OA-H 64SE-OA-H	Rp,FM, ON	2	HRA	SO2/HCl CH2-O/Cl
522	Scott	65-OA-H 65S-OA-H 65XL-OA-H	Rp,FM, FF	2	HRA	SO2/HCl CH2-O/Cl
523	Scott	64-OV-H 64E-OV-H 64M-OV-H 64ME-OV-H 64S-OV-H 64SE-OV-H	Rp,FM, ON	2	HRA	PLE/Pest
524	Scott	65-OV-H 65S-OV-H 65XL-OV-H	Rp,FM, FF	2	HRA	PLE/Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
529	Pirelli	4333.2021	Rp,FM, FF	2		
530	Survivair	2141-00 2241-00 2341-00	Rp,FM, ON	2	DFMR	Pest
531	Survivair	3241-00 4241-00	Rp,FM, FF	2	DFMR	Pest
532	Survivair	2143-00 2243-00 2343-00	Rp,FM, ON	2	DFMR	SO2/HCl CH2-O/Cl
533	Survivair	3243-00 4243-00	Rp,Fm,FF	2	DFMR	SO2,Cl HCl/CH2-O
535	Racal	BE3/AC BE7/AC	PAPR, FF	3		
538	Safety Supply	F-160-OV F-200-OV F-800-OV	Rp,FM, ON	2		
539	Safety Supply	F-700-OV	Rp,FM, FF	2		
540	Safety Supply	F-160-OV-F-SP F-200-OV-F-SP F-800-OV-F-SP	Rp,FM, ON	2		PLE
541	Safety Supply	F-700-OV-F-SP	Rp,FM, FF	2		PLE
542	Safety Supply	F-200-OA F-160-OA F-800-OA	Rp,FM, ON	2		SO2/HCl Cl

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
543	Safety Supply	F-700-OA	Rp,FM, FF	2		SO2/HCl Cl
548	Safety Supply	F-160-OV-F-P F-200-OV-F-P F-800-OV-F-P	Rp,FM, ON	2	DM	
549	Safety Supply	F-700-OV-F-P	Rp,FM, FF	2	DM	
552	Safety Supply	F-160-OA-F-P F-200-OA-F-P F-800-OA-F-P	Rp,FM, ON	2	DM	HCl/SO2 Cl
553	Safety Supply	F-700-OA-F-P	Rp,FM, FF	2	DM	SO2/HCl Cl
554	Pulmosan	10438 10441 11060	Rp,FM, ON	2	DM	PLE
555	Willson	1521 1521R 1521SS	Rp,FM, ON	2		
556	Willson	3521 3521R 3521SS	Rp,FM, ON	2		
557	Willson	1531 1531R 1531SS	Rp,FM, ON	2		
558	Willson	3531 3531R 3531SS	Rp,FM, ON	2		

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
563	Willson	1525 1525R 1525SS	Rp,FM, ON	2		SO2/HCl Cl
564	Willson	3525 3525R 3525SS	Rp,FM, ON	2		SO2/HCl Cl
565	Willson	1535 1535R 1535SS	Rp,FM, ON	2		SO2/HCl Cl
566	Willson	3535 3535R 3535SS	Rp,FM, ON	2		SO2/HCl Cl
567	Willson	152110 152110R 152110SS	Rp,FM, ON	2	DM	
568	Willson	352110 3521100R 352110SS	Rp,FM, ON	2	DM	
569	Willson	152113 152113R 153113SS	Rp,FM, ON	2	DFM	
570	Willson	352113 352113R 352113SS	Rp,FM, ON	2	DFM	
571	Willson	152115 152115R 152115SS	Rp,FM, ON	2	DM	PLE/Pest
572	Willson	352115 352115R 352115SS	Rp,FM, ON	2	DM	PLE/Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
573	Willson	152116 152116R 152116SS	Rp,FM, ON	2	DM	PLE
574	Willson	352116 352116R 352116SS	Rp,FM, ON	2	DM	PLE
577	Willson	152510 152510R 152510SS	Rp,FM, ON	2	DM	SO2/HCl Cl
578	Willson	352510 352510R 352510SS	Rp,FM, ON	2	DM	SO2/HCl Cl
579	Willson	153112 153112R 153112SS	Rp,FM, ON	2	HA	
580	Willson	353112 353112R 353112SS	Rp,FM, ON	2	HA	
583	Willson	153512 153512R 153512SS	Rp,FM, ON	2	HA	SO2/HCl Cl
584	Willson	353512 353512R 353512SS	Rp,FM, ON	2	HA	SO2/HCl Cl
585	AO	R4058A S4058A R5058A S5058A R6058A S6058A R5558A S5558A R6558A S6558A	Rp,FM, ON	2	DFM	Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
586	AO	R7058A S7058A R7758A S7758A	Rp,FM, ON	2	DFM	Pest
587	AO	R4563A S4563A R5563A S5563A R6563A S6563A R55563A S55563A R65563A S65563A	Rp,FM, ON	2	DFM	SO2/HCl ClO2/Pest Cl
588	AO	R7563A S7563A R77563A S77563A	Rp,FM, FF	2	DFM	SO2/HCl ClO2/Pest Cl
602	Racal	BE17/AP3	PAPR, HH	3	HRA	Pest
605	Racal	BE1/AE	PAPR, HH	3		SO2/HCl Cl
606	Racal	BE3/AE BE7/AE	PAPR, FF	3		SO2/HCl Cl
607	Racal	BE5/AE	PAPR, HH	3		SO2/HCl Cl
608	Racal	BE6/AE	PAPR, HH	3		SO2/HCl Cl
609	Racal	BE8/A	PAPR, ON	3		
611	Racal	BE8/AP3	PAPR, ON	3	HRA	Pest

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
615	Racal	BE8/AE	PAPR, ON	3		SO2/HCl Cl
616	Shoplyne	11060 10441	Rp,FM, ON	2	DM	PLE
617	Glendale	GR-1621-50 GR-2021-50 GR-8021-50	Rp,FM, ON	2	HRA	
618	Glendale	GR-7021-50	Rp,FM, FF	2	HRA	
621	Glendale	GR-2023-50 GR-8023-50 GR-1623-50 GR-4023-50	Rp,FM, ON	2	HRA	SO2/HCl Cl
622	Glendale	GR-7023-50	Rp, Fm, FF	2	HRA	SO2/HCl Cl
625	Neoterik	NP1562-5	PAPR, ON	3		
626	Neoterik	NP1562-7	PAPR, ON	3		SO2/HCl Cl
630	Racal	BE4/A	PAPR, HH	3		
632	Racal	BE4/AP3	PAPR, HH	3	HRA	Pest
636	Racal	BE4/AE	PAPR, HH	3		SO2/HCl Cl
637	Neoterik	NP1664-5 NP1564-5 1964-5	PAPR, FF	3		

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
638	Neoterik	NP1664-7 NP1564-7 1964-7	PAPR, FF	3		SO2/HCl Cl
647	Racal	BE3/AEP3 BE7/AEP3	PAPR, FF	2	HRA	SO2/HCl Cl
648	Racal	BE8/AEP3	PAPR, ON	3	HRA	SO2/HCl Cl
649	North	7591S/M/L 7791S/M/L	Rp,Fm, ON	2	DFM	
650	North	75BP91M 75BP91L	Rp, Bm, ON	2	DFM	
651	North	7691 7691S	Rp, Fm, FF	2	DFM	
655	North	7593S/M/L 7793S/M/L	Rp,Fm, ON	2	DFM	SO2/HCl Cl/CH2-O
656	North	75BP93M 75BP93L	Rp,Bm, ON	2	DFM	SO2/HCl Cl/CH2-O
657	North	7693 7693S	Rp,Fm, FF	2	DFM	SO2/HCl Cl/CH2-O
661	Protech	1694-G100	Rp,Fm, FF	2		
662	Protech	1694-G100-F100	Rp,Fm, FF	2	DM	
663	Protech	1694-G100-F108	Rp,Fm, FF	2	DFM	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
664	Protech	1694-G104	Rp,Fm, FF	2		SO2/HCl Cl
665	Protech	1694-G104-F100	Rp,Fm, FF	2	DMZ	SO2/HCl Cl
668	Protech	1694-G100-F102	Rp,Fm, FF	2		PLE
669	Protech	1694-G100-F104	Rp,Fm, FF	2	DM	Pest
670	Protech	1694-G104-G208	Rp,Fm, FF	2	HRA	SO2/HCl Cl
672	Protech	1694-G100-G208	Rp,Fm, FF	2		
675	Binks	40-411 40-412 40-413 40-414 40-415 40-416	Rp,Fm, ON	2	HA	PLE
676	AO	R8151A S8151A R8151A* S8151A*	Rp, Fm, ON	1	HRA	
677	AO	R8151AP* S8151AP*	Rp, Fm, ON	1	DM	PLE
678	Eastern	287	Rp, Fm, ON	2	HRA	SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
679	AO	R7070A S7070A R7770A S7770A	Rp, Fm, FF	2		SO2/HCl ClO2/Cl
683	3M	7801 7801C 7801-L 7801-H	Rp, Fm, FF (For 7801C Combination Type C, CF) Air pressure (psig) 15 - 40 17 - 45 22 - 55 25 - 70	2 Hose length (feet) 25 - 50 75 - 100 125 - 200 225 - 300		
			Hose Length (ft)	Pressure Range (psig) 7801-H	Pressure Range (psig) 7801-L	
			25	7.5 - 15.0	5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	
685	3M	7803 7803C 7803-L 7803-H	Rp, Fm, FF (For 7803C Combination Type C, CF) Air pressure (psig) 15 - 40 17 - 45 22 - 55 25 - 70	2 Hose length (feet) 25 - 50 75 - 100 125 - 200 225 - 300		Cl/HCl OV
			Hose Length (ft)	Pressure Range (psig) 7803-H	Pressure Range (psig) 7803-L	
			25	7.5 - 15.0	5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
688	3M	7807 7807C 7808-L 7808-H	Rp, Fm, FF	2	DM	

(For 7807C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7808-H	7808-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

690	3M	7809 7809C 7809-L 7809-H	Rp, Fm, FF	2	DM	SO2/Cl HCl

(For 7809C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7809-H	7809-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

691	3M	7810 7810C 7810-L 7810-H	Rp, Fm, FF	2	DM	PLE

(For 7810C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7810-H	7810-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
518	Scott	65-AG-H 65S-AG-H 65XL-AG-H	Rp,FM, FF	2	HRA	SO2/Cl CH2-O
521	Scott	64-OA-H 64E-OA-H 64M-OA-H 64ME-OA-H 64S-OA-H 64SE-OA-H	Rp,FM, ON	2	HRA	OV/SO2/Cl CH2-O
522	Scott	65-OA-H 65S-OA-H 65XL-OA-H	Rp,FM, FF	2	HRA	OV/SO2/Cl CH2-O
527	Pirelli	4333.2033	Rp,FM, FF	2		SO2/Cl
532	Survivair	2143-00 2243-00 2343-00	Rp,FM, ON	2	DFMR	OV/SO2/Cl CH2-O
533	Survivair	3243-00 4243-00	Rp,FM, FF	2	DFMR	OV/SO2/Cl CH2-O
534	Racal	BE3/BC BE7/BC	PAPR, FF	3		Cl
536	Safety Supply	F-200-AG F-160-AG F-800-AG	Rp,FM, ON	2		SO2/Cl
537	Safety Supply	F-700-AG	Rp,FM, FF	2		SO2/Cl
542	Safety Supply	F-200-OA F-160-OA F-800-OA	Rp,FM, ON	2		OV/SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
543	Safety Supply	F-700-OA	Rp,FM, FF	2		OV/SO2/Cl
550	Safety Supply	F-160-AG-F-P F-200-AG-F-P F-800-AG-F-P	Rp,FM, ON	2	DM	SO2/Cl
551	Safety Supply	F-700-AG-F-P	Rp,FM, FF	2	DM	SO2/Cl
552	Safety Supply	F-160-OA-F-P F-200-OA-F-P F-800-OA-F-P	Rp,FM, ON	2	DM	SO2/Cl
553	Safety Supply	F-700-OA-F-P	Rp,FM, FF	2	DM	OV/SO2/Cl
563	Willson	1525 1525R 1525SS	Rp,FM, ON	2		OV/SO2/Cl
564	Willson	3525 3525R 3525SS	Rp,FM, ON	2		OV/SO2/Cl
565	Willson	1535 1535R 1535SS	Rp,FM, ON	2		OV/SO2/Cl
566	Willson	3535 3535R 3535SS	Rp,FM, ON	2		OV/SO2/Cl
577	Willson	152510 152510R 152510SS	Rp,FM, ON	2	DM	OV/SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
578	Willson	352510 352510R 352510SS	Rp,FM, ON	2	DM	OV/SO2/Cl
583	Willson	153512 153512R 153512SS	Rp,FM, ON	2	HA	OV/SO2/Cl
584	Willson	353512 353512R 353512SS	Rp,FM, ON	2	HA	OV/SO2/Cl
587	AO	R4563A S4563A R5563A S5563A R6563A S6563A R55563A S55563A R65563A S65563A	Rp,FM, ON	2	DFM	OV/SO2/Cl CLO2/Pest
588	AO	R7563A S7563A R77563A S77563A	Rp,FM, FF	2	DFM	OV/SO2/Cl CLO2/Pest
593	Racal	BE1/E	PAPR, HH	3		SO2/Cl
594	Racal	BE3/EC BE7/EC	PAPR, FF	3		SO2/Cl
595	Racal	BE5/E	PAPR, HH	3		SO2/Cl
596	Racal	BE6/E	PAPR, HH	3		SO2/Cl
597	Racal	BE1/EP3	PAPR, HH	3	HRA	SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
598	Racal	BE3/EP3 BE 7/EP3	PAPR, FF	3	HRA	SO2/Cl
599	Racal	BE 5/EP3	PAPR, HH	3	HRA	SO2/Cl
600	Racal	BE6/EP3	PAPR, HH	1	HRA	SO2/Cl
601	AO	R9722A	ES, MP	1		SO2/Cl
603	Racal	BE17/P3	PAPR, HH	3	HRA	SO2/Cl
605	Racal	BE1/AE	PAPR, HH	3		OV/SO2/Cl
606	Racal	BE3/AE BE7/AE	PAPR, FF	3		OV/SO2/Cl
607	Racal	BE5/AE	PAPR, HH	3		OV/SO2/Cl
608	Racal	BE6/AE	PAPR, HH	3		OV/SO2/Cl
613	Racal	BE8/E	PAPR, ON	3		SO2/Cl
614	Racal	BE8/EP3	PAPR, ON	3	HRA	SO2/Cl
615	Racal	BE8/AE	PAPR	3		OV/SO2/Cl
619	Glendale	GR-1622-50 GR-2022-50 GR-4022-50 GR-8022-50	Rp,FM, ON	2	HRA	SO2/Cl
620	Glendale	GR-7022-50	Rp,FM, FF	2	HRA	SO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
621	Glendale	GR-2023-50 GR-8023-50 GR-1623-50 GR-4023-50	Rp,FM, ON	2	HRA	OV/SO2/Cl
622	Glendale	GR-4023-50 GR-7023-50	Rp, Fm, FF	2	HRA	OV/SO2/Cl
626	Neoterik	NP1562-7	PAPR, ON	3		OV/SO2/Cl
627	Neoterik	NP1562-6	PAPR, ON	3		SO2/Cl
631	Racal	BE4/B	PAPR, HH	3		Cl
634	Racal	BE4/E	PAPR, HH	3		SO2/Cl
635	Racal	BE4/EP3	PAPR, HH	3	HRA	SO2/Cl
636	Racal	BE4/AE	PAPR, HH	3		OV/SO2/Cl
638	Neoterik	NP1664-7 NP1564-7	PAPR, FF	3		OV/SO2/Cl
640	Neoterik	NP1664-6 NP1564-6	PAPR, FF	3		SO2/Cl
647	Racal	BE3/AEP3 BE7/AEP3	PAPR, FF	3	HRA	OV/SO2/Cl
648	Racal	BE8/AEP3	PAPR, ON	3	HRA	OV/SO2/Cl
652	North	7592S,M,L 7792S,M,L	Rp,Fm, ON	2	DFM	SO2/Cl CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
653	North	75BP92M 75BP92L	Rp,BM, ON	2	DFM	SO2/Cl CH2-O
654	North	7692 7692S	Rp,Fm, FF	2	DFM	SO2/Cl CH2-O
655	North	7593S/M/L 7793S/M/L	Rp,Fm, ON	2	DFM	OV/SO2/Cl CH2-O
656	North	75BP93M 75BP93L	Rp,Bm, ON	2	DFM	OV/SO2/Cl CH2-O
657	North	7693 7693S	Rp,Fm, FF	2	DFM	OV/SO2/Cl CH2-O
664	Protech	1694-G104	Rp,Fm, FF	2		OV/SO2/Cl
665	Protech	1694-G104-F100	Rp,Fm, FF	2	DMZ	OV/SO2/Cl
670	Protech	1694-G104-G208	Rp,Fm, FF	2	HRA	OV/SO2/Cl
671	Protech	1694-G102	Rp,Fm, FF	2		SO2/Cl
673	Protech	1694-G102-G208	Rp;Fm, FF	2	HRA	SO2/Cl
678	Eastern	287	Rp, Fm, ON	2	HRA	OV/SO2/Cl
679	AO	R7070A S7070A R7770A S7770A	Rp, Fm, FF	2		OV/SO2/Cl CLO2

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
684	3M	7802 7802C 7802-L 7802-H	Rp, Fm, FF (For 7802C Combination Type C, CF)	2		SO2/Cl

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7802-H	Pressure Range (psig) 7802-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

685	3M	7803 7803C 7803-L 7803-H	Rp, Fm, FF (For 7803C Combination Type C, CF)	2		SO2/Cl OV

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7803-H	Pressure Range (psig) 7803-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

689	3M	7808 7808C 7808-L 7808-H	Rp, Fm, FF (For 7808C Combination Type C, CF)	2	DM	SO2/Cl

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7808-H	Pressure Range (psig) 7808-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
690	3M	7809 7809C	Rp, Fm, FF	2	DM	SO2/Cl OV

(For 7809C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7809-H	7809-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

694	3M	7813 7813C 7813-L 7813-H	Rp, Fm, FF	2	HRA	SO2/Cl

(For 7813C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7813-H	7813-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

695	3M	7814 7814C 7814-L 7814-H	Rp, Fm, FF	2	HRA	SO2/Cl OV

(For 7814C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7814-H	7814-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
699	Willson	1226/R/S/SR/SS/SSS S1226/R/S/SR/SS/SSS	ON, Rp, Fm	2		SO2/Cl/ CH2-O
700	Willson	1626, 1726	FF, Rp, Fm	2		SO2/Cl/ CH2-O
701	Willson	1526, 1526R 1526SS	ON, Rp, Fm	2		SO2/Cl CH2-O
702	Willson	3026S/R/S/SR/SS/SSS S3026/R/S/SR/SS/SSS	ON, Rp, Bm	2		SO2/Cl CH2-O
703	Willson	3126, 3226	FF, Bm, Rp	2		SO2/Cl CH2-O
704	Willson	3526, 3526R 3526SS	ON, Bm, Rp	2		SO2/Cl CH2-O
705	Willson	122610/R/S/SR/SS/SSS S122610/R/S/SR/SS/SSS	ON, Rp, Fm	2	DM	SO2/Cl CH2-O
706	Willson	152610 152610R 152610SS	ON, Rp, Fm	2	DM	SO2/Cl CH2-O
707	Willson	162610 172610	FF, Rp, Fm	2	DM	SO2/Cl CH2-O
708	Willson	302610/R/S/SR/SS/SSS S302610/R/S/SR/SS/SSS	ON, Rp, Bm	2	DM	SO2/Cl CH2-O
709	Willson	312610 322610	FF, Rp, Bm	2	DM	SO2/Cl/ CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
710	Willson	352610 352610R 352610SS	ON, Rp, Bm	2	DM	SO2/Cl/ CH2-O
711	Willson	122617/R/S/SR/SS/SSS S122617/R/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	SO2/Cl CH2-O
712	Willson	162617 172617	FF, Rp, Fm	2	DFM	SO2/Cl CH2-O
713	Willson	152617 152617R 152617SS	FF, Rp, Fm	2	DFM	SO2/Cl CH2-O
714	Willson	302617/R/S/SR/SS/SSS S302617/R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	SO2/Cl CH2-O
715	Willson	312617 322617	FF, Rp, Bm	2	DFM	SO2/Cl/ CH2-O
716	Willson	352617 352617R 352617SS	ON, Rp, Bm	2	DFM	SO2/Cl CH2-O
717	Willson	122517/R/S/SR/SS/SSS S122517/R/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	SO2/Cl/OV
718	Willson	162517 172517	FF, Rp, Fm	2	DFM	SO2/Cl/OV
719	Willson	152517 152517R 152517SS	ON, Rp, Fm	2	DFM	SO2/Cl/OV

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
720	Willson	302517/R/S/SR/SS/SSS S302517/R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	SO2/Cl/OV
721	Willson	312517 322517	FF, Rp, Bm	2	DFM	SO2/Cl/OV
722	Willson	352517 352517R 352517SS	ON, Rp, Bm	2	DFM	SO2/Cl/OV
736	Willson	6105S 6105M 6105L	ON,Rp,Fm	2		OV/SO2/Cl
740	Willson	6205S 6205M 6205L	ON,Rp,Fm	1		OV/SO2/Cl
741	Willson	6106S 6106M 6106L	ON,Rp,Fm	2		SO2/Cl CH2-0
742	Willson	6206S 6206M 6206L	ON,Rp,Fm	1		SO2/Cl CH2-0
745	Willson	6405 S6405 6505 S6505	FF,Rp,Fm	2		SO2/Cl/OV
746	Willson	6406 S6406 6506 S6506	FF,Rp,Fm	2		SO2/Cl CH2-0

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
748	Willson	6415 S6415 6515 S6515	FF,Rp,Fm	2	DM	SO2/Cl/OV
749	Willson	6416 S6416 6516 S6516	FF,Rp,Fm	2	DM	SO2/Cl CH2-O
753	Willson	6115S 6115M 6115L	ON,Rp,Fm	2	DM	OV/SO2/Cl
754	Willson	6116S 6116M 6116L	ON,Rp,Fm	2	DM	SO2/Cl CH2-O
756	Willson	6215S 6215M 6215L	ON,Rp,Fm	1	DM	OV/SO2/Cl
757	Willson	6216S 6216M 6216L	ON,Rp,Fm	1	DM	SO2/Cl CH2-O
763	Willson	6145S 6145M 6145L	Rp,Fm,ON	2	HA	OV/SO2/Cl
764	Willson	6445 S6445 6545 S6545	Rp,Fm,FF	2	HA	OV/SO2/Cl
765	Willson	6146S 6146M 6146L	Rp,Fm,ON	2	HA	SO2/Cl CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
766	Willson	6546 S6546 6446 S6446	Rp,Fm,FF	2	HA	SO2/Cl CH2-O
768	Scott	66STC-AG S66STC-AG 66MTC-AG S66MTC-AG 66LTC-AG S66LTC-AG	Fm,Rp,ON	2		SO2/Cl CH2-O
769	Scott	66STC-AG-D S66STC-AG-D 66MTC-AG-D S66MTC-AG-D 66LTC-AG-D S66LTC-AG-D	Fm,Rp,ON	2	DM	SO2/Cl CH2-O
770	Scott	66STC-AG-F S66STC-AG-F 66MTC-AG-F S66MTC-AG-F 66LTC-AG-F S66LTC-AG-F	Fm,Rp,ON	2	DFMR	SO2/Cl CH2-O
771	Scott	66STC-AG-H S66STC-AG-H 66MTC-AG-H S66MTC-AG-H 66LTC-AG-H S66LTC-AG-H	Fm,Rp,ON	2	HRA	SO2/Cl CH2-O
776	Scott	66STC-OA S66STC-OA 66MTC-OA S66MTC-OA 66LTC-OA S66LTC-OA	Fm,Rp,ON	2		SO2/Cl/OV CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
777	Scott	66STC-OA-D S66STC-OA-D 66MTC-OA-D S66MTC-OA-D 66LTC-OA-D S66LTC-OA-D	Fm,Rp,ON	2	DM	SO2/Cl/OV CH2-O
778	Scott	66STC-OA-F S66STC-OA-F 66MTC-OA-F S66MTC-OA-F 66LTC-OA-F S66LTC-OA-F	Fm,Rp,ON	2	DFMR	SO2/Cl/OV CH2-O
779	Scott	66STC-OA-H S66STC-OA-H 66MTC-OA-H S66MTC-OA-H 66LTC-OA-H S66LTC-OA-H	Fm,Rp,ON	2	HRA	SO2/Cl/OV CH2-O
787	Willson	6125S 6125M 6125L	Rp,Fm,ON	2	DFMR	OV/SO2/Cl
788	Willson	6425 S6425 6525 S6525	Rp,Fm,FF	2	DFMR	OV/SO2/Cl
789	Willson	6126S 6126M 6126L	Rp,Fm,ON	2	DFMR	SO2/Cl CH2-O
790	Willson	6426 S6426 6526 S6526	Rp,Fm,FF	2	DFMR	SO2/Cl CH2-O

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
794	AO	S7553HE S7553HEC	FF,Rp,Fm	2 For S7557HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	HRA	SO2/Cl CLO2
798	AO	S7552A S7552AC	FF,Rp,Fm	2 For S7552AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		SO2/Cl
799	AO	S7553A S7553AC	FF,Rp,Fm	2 For S7553AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		OV/SO2/Cl CLO2
803	AO	S7552HE S7552HEC	FF,Rp,Fm	2 For S7552HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	HRA	SO2/Cl
805	AO	S7570A S7570AC	FF,Rp,Fm	2 For S7570AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		OV/SO2/Cl CLO2
808	AO	S7552AD S7552ADC	FF,Rp,Fm	2 For S7552ADC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	DM	SO2/Cl CLO2

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
809	AO	S7553AD S7553ADC	FF,Rp,Fm	2 For S7553ADC Comb. Type C, CF Hose Length feet: 25 - 300	DM Press. Range psig: 14 - 37	OV/SO2/Cl CLO2
812	AO	S75563A S75563AC	FF,Rp,Fm	2 For S75563AC Comb. Type C, CF Hose Length feet: 25 - 300	DFM Press. Range psig: 14 - 37	OV/SO2/Cl CLO2
817	Glendale	GR9522	Rp,Fm,ON	2		SO2/Cl
818	Glendale	GR9522-10	Rp,Fm,ON	2	DM	SO2/Cl
819	Glendale	GR9522-50	Rp,Fm,ON	2	HRA	SO2/Cl
820	Glendale	GR9523	Rp,Fm,ON	2		OV/SO2/Cl
821	Glendale	GR9523-10	Rp,Fm,ON	2	DM	OV/SO2/Cl
822	Glendale	GR9523-50	Rp,Fm,ON	2	HRA	OV/SO2/Cl
828	Willson	6225S 6225M 6225L	Rp,Fm,ON	1	DFM	OV/SO2/Cl
829	Willson	6226S 6226M 6226L	Rp,Fm,ON	1	DFM	SO2/Cl CH2-0

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
832	MSA	484475	FF,Rp,Fm	2	DM	SO2/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
833	MSA	484476	FF,Rp,Fm	2	DM	OV/SO2/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
836	MSA	484480	FF,Rp,Fm	2	HA	SO2/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
837	MSA	484488	FF,Rp,Fm	2	DM	SO2/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
839	MSA	484481	FF,Rp,Fm	2	HA	OV/SO2/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
843	MSA	483992	Rp,Fm,FF	2	DM	SO2/Cl CH2-O
				Comb. Type C, CF Hose Length (feet): 8-300 Press. Range psig: 35 - 40		

CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
844	MSA	483993	Rp,Fm,FF	2	DM	OV/SO2/Cl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
851	MSA	483997	Rp,Fm,FF	2	HA	SO2/Cl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
852	MSA	484005	Rp,Fm,FF	2	DM	OV/SO2/Cl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
853	MSA	483999	Rp,Fm,FF	2	DFMR	OV/SO2/Cl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
854	MSA	483998	Rp,Fm,FF	2	HRA	OV/SO2/Cl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	

5. Sulfur Dioxide

Approval

Approved as respiratory protection against not more than 50 parts per million sulfur dioxide.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

E. Chemical Cartridges
5. Sulfur Dioxide

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
41	MSA	459434 461006	Rp,Fm,Bm, ON	2	DM	HCl/Cl/ CH2-O
47	MSA	459435 461007	Rp,Fm,Bm, ON	2	DM	OV/HCl/Cl CH2-O
60	AO	R4052* R5052* R6052*	Rp,Fm, ON	2		HCl/Cl
65	North	7503* 7503M 7703M 7503S 7703S 7503L 7703L	Rp,Fm, ON	2		OV/HCl/Cl
66	North	7513* 7513M 7713M 7513S 7713S 7513L 7713L	Rp,Fm, ON	2	DM	OV/HCl/Cl
76	Willson	1225 S1225 1225S S1225S 1225SR S1225SR S1225R S1225SS S1225SSS 1225SSS 1225R 1225SS	Rp,Fm, ON	2		OV/HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
77	Willson	122510 122510R 122510S 122510SR 122510SS 122510SSS S122510 S122510R S122510S S122510SR S122510SS S122510SSS	Rp,Fm, ON	2	DM	OV/HCl/Cl
82	AO	R4053* R5053* R6053*	Rp,Fm, ON	2		OV/HCl/Cl
85	AO	R8153 S8153	Rp,Fm, ON	1		OV/HCl/Cl
104	North	75BP03* 75BP03M 75BP03L	Rp,Bm, ON	2		OV/HCl/Cl
105	North	75BP13* 75BP13M 75BP13L	Rp,Bm, ON	2	DM	OV/HCl/Cl
111	AO	R9722	Es, M	1	DM	HCl/Cl
115	Scott	6411-0001* 6413-0001* 6421-0001* 6423-0001* 6412-0001* 6422-0001* 64-AG 64E-AG 64M-AG 64ME-AG 64S-AG 64SE-AG	Rp,Fm, ON	2		HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
116	Scott	6411-0101* 6413-0101* 6421-0101* 6423-0101* 6412-0101* 6422-0101* 64-AG-D 64E-AG-D 64M-AG-D 64ME-AG-D 64S-AG-D 64SE-AG-D 64032-01*	Rp,Fm, ON	2	DMZ	HCl/Cl CH2-O
122	North	7542* 7542M*	Rp,Fm, ON	2	DMZ	HCl/Cl
129	3M	8714 8720	Su, ON	1	DM 8720 only	HCl/Cl
141	Willson	1625 1725	Rp,Fm, FF	2		OV/HCl/Cl
142	Willson	162510 172510	Rp,Fm, FF	2	DM	OV/HCl/Cl
145	MSA	461849	Rp,Fm, FF	2	DM	HCl/Cl CH2-O
146	MSA	461850	Rp,Fm, FF	2	DM	OV/HCl/Cl CH2-O
150	MSA	461854	Rp,Fm, FF	2	HA	HCl/Cl CH2-O
153	MSA	461855	Rp,Fm, FF	2	HA	OV/HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
154	MSA	461856	Rp,Fm, FF	2	DFMR	OV/HCl/Cl CH2-O
156	MSA	461835 462239	Rp,Fm,Bm, ON	2	HA	HCl/Cl CH2-O
159	MSA	460847 461013	Rp,Fm,Bm, ON	2	HA	OV/HCl/Cl CH2-O
160	MSA	460848 461014	Rp,Fm,Bm, ON	2	DFMR	OV/HCl/Cl CH2-O
163	Protech	1482-G104 1482-S-G104 1482-L-G104 1482-G104-F100 1482-S-G104-F100 1482-L-G104-F100 1585S-G104 1585-G104 1585L-G104 1585S-G104-F100 1585-G104-F100 1585L-G104-F100	Rp,Fm, ON	2	DMZ 1482-G104-F100 1482-S-G104-F100 1482-L-G104-F100 1585-G104-F100 1585S-G104-F100 1585L-G104-F100 only	OV/HCl/Cl
163	Sellstrom	315-G104 315-G104-F100	Rp,Fm, ON	2	DMZ 315-G104-F100	OV/HCl/Cl
163	Eastern	E452	Rp,Fm, ON	2	DMZ	OV/HCl/Cl
164	Cesco	95RC55 95SMRC55	Fm, ON	2		OV/HCl/Cl
165	Cesco	95RC75 95SMRC75	Rp,Fm, ON	2	DM	HCl/Cl
166	Cesco	95RC85 95SMRC85	Fm, ON	2		OV/HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
167	Cesco	95RC105 95SMRC105	Rp,Fm, ON	2	DM	OV/HCl/Cl
168	US Safety	150T21 150L21	Fm, ON	2		HCl/Cl
169	US Safety	150T25 150L25	Rp,Fm, ON	2	DM	HCl/Cl
170	US Safety	150T26 150L26	Fm, ON	2		OV/HCl/Cl
171	US Safety	150T28 150L28	Rp,Fm, ON	2	DM	OV/HCl/Cl
172	Scott	6411-0015* 6412-0015* 6413-0015* 6421-0015* 6422-0015* 6423-0015* 64-OA 64E-OA 64M-OA 64ME-OA 64S-OA 64SE-OA	Fm, ON	2		OV/HCl/Cl CH2-O
174	Scott	6411-0115* 6412-0115* 6413-0115* 6421-0115* 6422-0115* 6423-0115* 64-OA-D 64E-OA-D 64M-OA-D 64ME-OA-D 64S-OA-D 64SE-OA-D 604032-15*	Fm, ON	2	DMZ	OV/HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
179	North	75BP42* 75BP42M*	Rp,Bm, ON	2	DMZ	HCl/Cl
181	North	7603 7603S 7603N* 7603SN*	Rp,Fm, FF	2		OV/HCl/Cl
183	Glendale	GR-1622 GR-2022 GR-4022 GR-8022	Rp,Fm, ON	2		HCl/Cl
184	Glendale	GR-1622-10 GR-2022-10 GR-4022-10 GR-8022-10	Rp,Fm, ON	2	DM	HCl/Cl
186	North	7613 7613S 7613N* 7613SN*	Rp,Fm, FF	2	DM	OV/HCl/Cl
189	North	7642* 7642S* 7642N* 7642SN*	Rp,Fm, FF	2	DMZ	HCl/Cl
203	Pulmosan	10012 10186 10240 10273	Rp,Fm, ON	1		HCl/Cl
207	North	7582M 7782M 7582S 7782S 7582L 7782L 7582*	Rp,Fm, ON	2	HRA	HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
208	North	75BP82* 75BP82M 75BP82L	Rp,Bm, ON	2	HRA	HCl/Cl CH2-O
209	North	7682 7682S	Rp,Fm, FF	2	HRA	HCl/Cl CH2-O
210	North	7583M 7783M 7583S 7783S 7583L 7783L 7583*	Rp,Fm, ON	2	HRA	OV/HCl/Cl
211	North	75BP83* 75BP83M 75BP83L	Rp,Bm, ON	2	HRA	OV/HCl/Cl
212	North	7683S 7683	Rp,Fm, FF	2	HRA	OV/HCl/Cl
216	3M	8725 8726	Su, ON	1	DM 8726 only	OV/HCl/Cl
218	Scott	6470-0101* 6480-0101* 65-AG-D 65S-AG-D	Rp,Fm, FF	2	DM	HCl/Cl CH2-O
221	Scott	6470-0015* 6480-0015* 65-OA 65S-OA	Rp,Fm, FF	2		OV/HCl/Cl CH2-O
222	Scott	6470-0115* 6480-0115* 65-OA-D 65S-OA-D	Rp,Fm, FF	2	DM	OV/HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
225	Scott	6470-0001 6480-0001 65-AG 65S-AG	Rp,Fm, FF	2		HCl/Cl CH2-O
226	North	7502* 7502S 7702S 7502M 7702L 7502L 7702M	Rp,Fm, ON	2		HCl/Cl CH2-O
227	North	75BP02* 75BP02M 75BP02L	Rp,Bm, ON	2		HCl/Cl CH2-O
228	North	7602 7602S 7602N* 7602SN*	Rp,Fm, FF	2		HCl/Cl CH2-O
229	North	7512* 7512S 7512M 7512L 7712S 7712M 7712L	Rp,Fm, ON	2	DM	HCl/Cl CH2-O
230	North	75BP12* 75BP12M 75BP12L	Rp,Bm, ON	2	DM	HCl/Cl CH2-O
231	North	7612 7612S 7612N* 7612SN*	Rp,Fm, FF	2	DM	HCl/Cl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
232	Pulmosan	10027 10201 10252 10285	Rp,Fm, ON	1	DM	HCl/Cl
233	AO	R7052*	Rp,Fm, FF	2		HCl/Cl
234	AO	R7053*	Rp,Fm, FF	2		OV/HCl/Cl
241	Glendale	GR-1623 GR-2023 GR-4023 GR-8023	Rp,Fm, ON	2		OV/HCl/Cl
242	Glendale	GR1623-10 GR2023-10 GR4023-10 GR8023-10	Rp,Fm, ON	2	DM	OV/HCl/Cl
246	Scott	6411-0301* 64-AG-F 6413-0301* 64E-AG-F 6421-0301* 64M-AG-F 6423-0301* 64ME-AG-F 6412-0301* 64S-AG-F 6422-0301* 64SE-AG-F	Rp,Fm, ON	2	DFMR	HCl/Cl CH2-O
247	Scott	6470-0301* 6480-0301* 65-AG-F 65S-AG-F	Rp,Fm, FF	2	DFMR	HCl/Cl CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
250	Scott	6411-0315* 64-OA-F 6413-0315* 64M-OA-F 6421-0315* 64ME-OA-F 6423-0315* 64E-OA-F 6412-0315* 64S-OA-F 6422-0315* 64SE-OA-F	Rp,Fm, ON	2	DFMR	OV/HCl/Cl CH2-O
251	Scott	6470-0315* 6480-0315* 65-OA-F 65S-OA-F	Rp,Fm, FF	2	DFMR	OV/HCl/Cl CH2-O
260	MSA	466903	Rp,Fm, ON	2	DM	OV/HCl/Cl CH2-O
261	MSA	466902	Rp,Bm, ON	2	DM	OV/HCl/Cl CH2-O
262	MSA	466904	Rp,Fm, FF	2	DM	OV/HCl/Cl CH2-O
265	Cesco	96RC75	Rp,Fm, FF	2	DM	HCl/Cl
266	US Safety	151T25	Rp,Fm, FF	2	DM	HCl/Cl
267	Cesco	96RC105	Rp,Fm, FF	2	DM	OV/HCl/Cl
268	US Safety	151T28	Rp,Fm, FF	2	DM	OV/HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
281	AO	R4563 S4563 R5563 S5563 R6563 S6563	Rp,Fm, ON	2	DFM	OV/HCl/Cl Pest
282	AO	R7563 S7563	Rp,Fm, FF	2	DFM	OV/HCl/Cl Pest
288	North	7902	Es, M	1		HCl/Cl
298	Willson	1235 1235S S1235 1235SR S1235R S1235S S1235SS S1235SSS 1235SSS 1235R 1235SS 1235R	Rp, Fm, ON	2		OV/HCl/Cl
299	Willson	123512 S123512 123512S S123512R 123512SR S123512S S123512SS S123512SSS 123512SSS 123512R 123512SS S123512SR	Rp, FM, ON	2	HA	OV/HCl/Cl
300	Willson	1635 1735	Rp, FM, FF	2		OV/HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
301	Willson	163512 173512	Rp, FM, FF	2	HA	OV/HCl/Cl
306	Cesco	95RC50 95SMRC50	Rp, FM, ON	2	HRA	HCl/Cl
307	US Safety	150T41 150L41	Rp, FM, ON	2	HRA	HCl/Cl
308	Cesco	96RC50	Rp, FM, FF	2	HRA	HCl/Cl
309	US Safety	151T41	Rp, FM, FF	2	HRA	HCl/Cl
310	Cesco	95RC80 95SMRC80	Rp, FM, ON	2	HRA	OV/HCl/Cl
311	US Safety	150T46 150L46	Rp, FM, ON	2	HRA	OV/HCl/Cl
312	Cesco	96RC80	Rp, FM, FF	2	HRA	OV/HCl/Cl
313	US Safety	151T46	Rp, FM, FF	2	HRA	OV/HCl/Cl
318	Survivair	2203-00 2103-00 2303-00	Rp, FM, ON	2		OV/HCl/Cl CH2-O
320	Pulmosan	10015 10189 10243 10276	Rp, FM, ON	1		OV/HCl/Cl
324	Pulmosan	10030 10255 10204 10288	Rp, FM, ON	1	DM	OV/HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
339	AO	R4052A S4052A R5052A S5052A R6052A S6052A R5552A S5552A	Rp,Fm, ON	2		HCl/Cl
340	AO	R7052A S7052A R7752A S7752A	Rp,Fm, FF	2		HCl/Cl
341	AO	R4052AD R5052AD R6052AD S4052AD S5052AD S6052AD R5552AD S5552AD	Rp,Fm, ON	2	DM	HCl/Cl
342	AO	R7052AD S7052AD R7752AD S7752AD	Rp,Fm, FF	2	DM	HCl/Cl
343	AO	R4053A S4053A R5053A S5053A R6053A S6053A R5553A S5553A	Rp,Fm, ON	2		OV/HCl/Cl ClO2
344	AO	R7053A 57053A R7753A S7753A	Rp,Bm, FF	2		OV/HCl/Cl ClO2

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
345	AO	R4053AD S4053AD R5053AD S5053AD R6053AD S6053AD R5553AD S5553AD	Rp,Fm, ON	2	DM	OV/HCl/Cl ClO2
346	AO	R7053AD S7053AD R7753AD S7753AD	Rp,Fm, FF	2	DM	OV/HCl/Cl ClO2
352	North	10003S 10003M	Su, ON	1		OV/HCl/Cl
353	North	10002S 10002M	Su, ON	1		HCl/Cl
356	North	10012S 10012M	Su, ON	1	DM	HCl/Cl
357	North	10013S 10013M	Su, ON	1	DM	OV/HCl/Cl
359	Protech	1482-G102 1482-S-G102 1482-L-G102 1585S-G102 1585-G102 1585L-G102	Rp,Fm, ON	2		HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
368	Willson	3025 3025S S3025 3025R S3025R 3025SR S3025S 3025SSS S3025SS S305SSS 3025SS 3025SR	Rp,Bm, ON	2		OV/HCl/Cl
369	Willson	3125 3225	Rp, Bm, FF	2		OV/HCl/Cl
370	Willson	3035 3035S S3035 3035R S3035S 3035SR S3035R S3035SR S3035SS S3035SSS 3035SS 3035SSS	Rp, Bm, ON	2		OV/HCl/Cl
371	Willson	3135 3235	Rp,Bm, FF	2		OV/HCl/Cl
380	Willson	302510 S302510 302510R S302510S 302510S S302510R 302510SR S302510SR S302510SS S302510SSS 302510SS 302510SSS	Rp,Bm, ON	2	DM	OV/HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
381	Willson	312510 322510	Rp,Bm, FF	2	DM	OV/HCl/Cl
386	Willson	303512 303512R 303512S 303512SR 303512SS 303512SSS S303512 S303512S S303512R S303512SR S303512SS S303512SSS	Rp,Bm, ON	2	HA	OV/HCl/Cl
387	Willson	313512 323512	Rp,Bm, FF	2	HA	OV/HCl/Cl
393	Survivair	2133-00* 2233-00* 2333-00*	Rp,Fm, ON	2	DFMR	OV/HCl/Cl
394	Survivair	3233-00*	Rp,Fm, FF	2	DFMR	OV/HCl/Cl
395	Survivair	2192-00 2292-00 2392-00	Rp,Fm, ON	2	HA	HCl/Cl
396	Survivair	3292-00	Rp,Fm, FF	2	HA	HCl/Cl
407	Glendale	GR7022	Rp,Fm, FF	2		HCl/Cl
408	Glendale	GR7022-10	Rp,Fm, FF	2	DM	HCl/Cl
410	Glendale	GR7023	Rp,Fm, FF	2		OV/HCl/Cl
411	Glendale	GR7023-10	Rp,Fm, FF	2	DM	OV/HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
415	AO	R4052HE S4052HE R5052HE S5052HE R6052HE S6052HE R5552HE S5552HE R6552HE S6552HE	Rp,Fm, ON	2	HRA	HCl/Cl
416	AO	R7052HE S7052HE R7752HE S7752HE	Rp,Fm, FF	2	HRA	HCl/Cl
417	AO	R4053HE S4053HE R5053HE S5053HE R6053HE S6053HE R5553HE S5553HE R6553HE S6553HE	Rp,Fm, ON	2	HRA	OV/HCl/Cl ClO2/Pest
418	AO	R7053HE S7053HE R7753HE S7753HE	Rp,Fm, FF	2	HRA	OV/HCl/Cl ClO2/Pest
421	Protech	1482-G104-G208 1482-S-G104-G208 1482-L-G104-G208 1585S-G104-G208 1585-G104-G208 1585L-G104-G208	Rp,Fm, ON	2	HRA	OV/HCl/Cl
429	Survivair	3202-00 4202-00	Rp,Fm, FF	2		HCl/Cl
430	Survivair	2102-00 2202-00 2302-00	Rp,Fm, ON	2		HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
431	Survivair	2112-00 2212-00 2312-00	Rp,Fm, ON	2	DM	HCl/Cl
432	Survivair	3212-00 4212-00	Rp,Fm, FF	2	DM	HCl/Cl
433	Survivair	2113-00 2213-00 2313-00	Rp,Fm, ON	2	DM	OV/HCl/Cl CH2-O
434	Survivair	3213-00 4213-00	Rp,Fm, ON	2	DM	OV/HCl/Cl CH2-O
443	3M	7202	Rp,Fm, ON	2		HCl/Cl
444	3M	7208	Rp,Fm, ON	2	DM	HCl/Cl
445	3M	7213	Rp,Fm, ON	2	HRA	HCl/Cl
446	3M	7203	Rp,Fm, ON	2		OV/HCl/Cl
447	3M	7209	Rp,Fm, ON	2	DM	OV/HCl/Cl
448	3M	7214	Rp,Fm, ON	2	HRA	OV/HCl/Cl
449	North	7912	Es, M	1	DM	HCl/Cl
450	Survivair	2193-00 2293-00 2393-00	Rp,Fm, ON	2	HA	OV/HCl/Cl
451	Survivair	3293-00 4293-00	Rp,Fm, FF	2	HA	OV/HCl/Cl
454	Survivair	3203-00 4203-00	Rp,Fm, FF	2		OV/HCl/Cl CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
459	Protech	1482-G102-G208 1482-S-G102-G208 1482-L-G102-G208 1585S-G102-G208 1585-G102-G208 1585L-G102-G208	Rp,Fm, ON	2	HRA	HCl/Cl
461	MSA	472749	Rp,Bm, ON	2	DM	HCl/Cl CH2-O
462	MSA	472750	Rp,Bm, ON	2	DM	OV/HCl/Cl CH2-O
466	MSA	472756	Rp,Bm, ON	2	HA	OV/HCl/Cl CH2-O
467	MSA	472757	Rp,Bm, ON	2	DFMR	OV/HCl/Cl CH2-O
470	MSA	472760	Rp,Bm, ON	2	HA	HCl/Cl CH2-O
472	MSA	472764	Rp,Bm, ON	2	DM	OV/HCl/Cl CH2-O
487	Sellstrom	315-G102-G208*	Rp,FM, ON	2	HRA	HCl/Cl
496	Pulmosan	10411	Rp,FM, FF	1		HCl/Cl
497	Pulmosan	10414	Rp, FM, FF	1		OV/HCl/Cl
500	Pulmosan	10423	Rp, FM, FF	1	DM	HCl/Cl
501	Pulmosan	10426	Rp, FM, FF	1	DM	OV/HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
511	MSA	469728	Rp,FM, ON	1	DM	OV/HCl/Cl CH2-O
512	MSA	469729	Rp,FM, ON	1	DM	OV/HCl/Cl CH2-O
514	MSA	471914 476337 476338	ES, MP	1	DM	HCl/Cl H2S
516	Pirelli	4336.2023	Rp,FM, ON	2		HCl/Cl
517	Scott	64-AG-H 64E-AG-H 64M-AG-H 64ME-AG-H 64S-AG-H 64SE-AG-H	Rp,FM, ON	2	HRA	HCl/Cl CH2-O
518	Scott	65-AG-H 65S-AG-H 65XL-AG-H	Rp,FM, FF	2	HRA	HCl/Cl CH2-O
521	Scott	64-OA-H 64E-OA-H 64M-OA-H 64ME-OA-H 64S-OA-H 64SE-OA-H	Rp,FM, ON	2	HRA	OV/HCl/Cl CH2-O
522	Scott	65-OA-H 65S-OA-H 65XL-OA-H	Rp,FM, FF	2	HRA	OV/HCl/Cl CH2-O
527	Pirelli	4333.2033	Rp,FM, FF	2		HCl/Cl
532	Survivair	2143-00 2243-00 2343-00	Rp,FM, ON	2	DFMR	OV/HCl/Cl CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
533	Survivair	3243-00 4243-00	Rp,FM, FF	2	DFMR	OV/HCl/Cl CH2-O
536	Safety Supply	F-200-AG F-160-AG F-800-AG	Rp,FM, ON	2		HCl/Cl
537	Safety Supply	F-700-AG	Rp,FM, FF	2		HCl/Cl
542	Safety Supply	F-200-OA F-160-OA F-800-OA	Rp,FM, ON	2		OV/HCl/Cl
543	Safety Supply	F-700-OA	Rp,FM, FF	2		OV/HCl/Cl
550	Safety Supply	F-160-AG-F-P F-200-AG-F-P F-800-AG-F-P	Rp,FM, ON	2	DM	HCl/Cl
551	Safety Supply	F-700-AG-F-P	Rp,FM, FF	2	DM	HCl/Cl
552	Safety Supply	F-160-OA-F-P F-200-OA-F-P F-800-OA-F-P	Rp,FM, ON	2	DM	HCl/Cl
553	Safety Supply	F-700-OA-F-P	Rp,FM, FF	2	DM	OV/HCl/Cl
563	Willson	1525 1525R 1525SS	Rp,FM, ON	2		OV/HCl/Cl
564	Willson	3525 3525R 3525SS	Rp,FM, ON	2		OV/HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
565	Willson	1535 1535R 1535SS	Rp,FM, ON	2		OV/HCl/Cl
566	Willson	3535 3535R 3535SS	Rp,FM, ON	2		OV/HCl/Cl
577	Willson	152510 152510R 152510SS	Rp,FM, ON	2	DM	OV/HCl/Cl
578	Willson	352510 352510R 352510SS	Rp,FM, ON	2	DM	OV/HCl/Cl
583	Willson	153512 153512R 153512SS	Rp,FM, ON	2	HA	OV/HCl/Cl
584	Willson	353512 353512R 353512SS	Rp,FM, ON	2	HA	OV/HCl/Cl
587	AO	R4563A S4563A R5563A S5563A R6563A S6563A R55563A S55563A R65563A S65563A	Rp,FM, ON	2	DFM	OV/HCl/Cl ClO2/Pest
588	AO	R7563A S7563A R77563A S77563A	Rp,FM, FF	2	DFM	OV/HCl/Cl ClO2/Pest
593	Racal	BE1/E	PAPR, HH	3		HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
594	Racal	BE3/EC BE7/EC	PAPR, FF	3		HCl/Cl
595	Racal	BE5/E	PAPR, HH	3		HCl/Cl
596	Racal	BE6/E	PAPR, HH	3		HCl/Cl
597	Racal	BE1/EP3	PAPR, HH	3	HRA	HCl/Cl
598	Racal	BE3/EP3 BE7/EP3	PAPR, FF	3	HRA	HCl/Cl
599	Racal	BE5/EP3	PAPR, HH	3	HRA	HCl/Cl
600	Racal	BE6/EP3	PAPR, HH	1	HRA	HCl/Cl
601	AO	R9722A	ES, MP	1		HCl/Cl
603	Racal	BE17/P3	PAPR, HH	3	HRA	HCl/Cl
605	Racal	BE1/AE	PAPR, HH	3		OV/HCl/Cl
606	Racal	BE3/AE BE7/AE	PAPR, FF	3		OV/HCl/Cl
607	Racal	BE5/AE	PAPR, HH	3		OV/HCl/Cl
608	Racal	BE6/AE	PAPR, HH	3		OV/HCl/Cl
613	Racal	BE8/E	PAPR, ON	3		HCl/Cl
614	Racal	BE8/EP3	PAPR, ON	3	HRA	HCl/Cl
615	Racal	BE8/AE	PAPR, ON	3		OV/HCl/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
619	Glendale	GR-1622-50 GR-2022-50 GR-4022-50 GR-8022-50	Rp,FM, ON	2	HRA	Cl/HCl
620	Glendale	GR-7022-50	Rp,FM, FF	2	HRA	HCl/Cl
621	Glendale	GR-2023-50 GR-8023-50 GR-1623-50 GR-4023-50	Rp,FM, ON	2	HRA	OV/HCl/Cl
622	Glendale	GR-4023-50 GR-7023-50	Rp, Fm, FF	2	HRA	OV/HCl/Cl
626	Neoterik	NP1562-7	PAPR, ON	3		OV/HCl/Cl
627	Neoterik	NP1562-6	PAPR, ON	3		HCl/Cl
634	Racal	BE4/E	PAPR, HH	3		HCl/Cl
635	Racal	BE4/EP3	PAPR, HH	3	HRA	HCl/Cl
636	Racal	BE4/AE	PAPR, HH	3		OV/HCl/Cl
638	Neoterik	NP1664-7 NP1564-7 1964-7	PAPR, FF	3		OV/HCl/Cl
640	Neoterik	NP1664-6 NP1564-6 1964-6	PAPR, FF	3		HCl/Cl
647	Racal	BE3/AEP3 BE7/AEP3	PAPR, FF	3	HRA	OV/HCl/Cl
648	Racal	BE8/AEP3	PAPR, ON	3	HRA	OV/HCl/Cl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
652	North	7592S/M/L 7792S/M/L	Rp,Fm, ON	2	DFM	HCl/Cl CH2-O
653	North	75BP92M 75BP92L	Rp,BM, ON	2	DFM	HCl/Cl CH2-O
654	North	7692 7692S	Rp,Fm, FF	2	DFM	HCl/Cl CH2-O
655	North	7593S/M/L 7793S/M/L	Rp,Fm, ON	2	DFM	OV/HCl/Cl CH2-O
656	North	75BP93M 75BP93L	Rp,Bm, ON	2	DFM	OV/HCl/Cl CH2-O
657	North	7693 7693S	Rp,Fm, FF	2	DFM	OV/HCl/Cl CH2-O
664	Protech	1694-G104	Rp,Fm, FF	2		OV/HCl/Cl
665	Protech	1694-G104-F100	Rp,Fm, FF	2	DMZ	OV/HCl/Cl
670	Protech	1694-G104-G208	Rp,Fm, FF	2	HRA	OV/HCl/Cl
671	Protech	1694-G102	Rp,Fm, FF	2		HCl/Cl
673	Protech	1694-G102-G208	Rp,Fm, FF	2	HRA	HCl/Cl
678	Eastern	287	Rp, Fm, ON	2	HRA	OV/HCl/Cl
679	AO	R7070A S7070A R7770A S7770A	Rp, Fm, FF	2		OV/HCl/Cl ClO2

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
684	3M	7802 7802C 7802-L 7802-H	Rp, Fm, FF (For 7802C Combination Type C, CF)	2		Cl/HCl

Air pressure (psig)	Hose length (feet)
15 - 44	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7802-H	7802-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
685	3M	7803 7803C 7803-L 7803-H	Rp, Fm, FF (For 7803C Combination Type C, CF)	2		Cl/HCl/OV

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7803-H	7803-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
689	3M	7808 7808C	Rp, Fm, FF (For 7808C Combination Type C, CF)	2	DM	Cl/HCl

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7808-H	7808-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
690	3M	7809 7809C 7809-L 7809-H	Rp, Fm, FF	2	DM	Cl/HCl/ OV
			(For 7809C Combination Type C, CF)			
			Air pressure (psig)	Hose length (feet)		
			15 - 40	25 - 50		
			17 - 45	75 - 100		
			22 - 55	125 - 200		
			25 - 70	225 - 300		
			Hose Length (ft)	Pressure Range (psig) 7809-H	7809-L	
			25	7.5 - 15.0	5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	
694	3M	7813 7813C 7813-L 7813-H	Rp,Fm,FF	2	H,R,A	Cl/HCl
			For 7813C Combination Type C, CF			
			Air pressure (psig)	Hose length (feet)		
			15 - 40	25 - 50		
			17 - 45	75 - 100		
			22 - 55	125 - 200		
			25 - 70	225 - 300		
			Hose Length (ft)	Pressure Range (psig) 7813-H	7813-L	
			25	7.5 - 15.0	5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	
695	3M	7814 7814C 7814-L 7814-H	Rp,Fm,FF	2	H,R,A	Cl/HCl
			For 7814C Combination Type C, CF			
			Air pressure (psig)	Hose length (feet)		
			15 - 40	25 - 50		
			17 - 45	75 - 100		
			22 - 55	125 - 200		
			25 - 70	225 - 300		
			Hose Length (ft)	Pressure Range (psig) 7814-H	7814-L	
			25	7.5 - 15.0	5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
699	Willson	1226S/R/S/SR/SS/SSS S1226/R/S/SR/SS/SSS	ON, Rp, Fm	2		Cl/HCl/ CH2-O
700	Willson	1626, 1726	FF, Rp, Fm	2		Cl/HCl/ CH2-O
701	Willson	1526, 1526R 1526SS	ON, Rp, Fm	2		Cl/HCl CH2-O
702	Willson	3026S/R/S/SR/SS/SSS S3026/R/S/SR/SS/SSS	ON, Rp, Bm	2		Cl/HCl CH2-O
703	Willson	3126, 3226	FF, Bm, Rp	2		Cl/HCl CH2-O
704	Willson	3526, 3526R 3526SS	ON, Bm, Rp	2		Cl/HCl CH2-O
705	Willson	122610/R/S/SR/SS/SSS S122610/R/S/SR/SS/SSS	ON, Rp, Fm	2	DM	Cl/HCl CH2-O
706	Willson	152610 152610R 152610SS	ON, Rp, Fm	2	DM	Cl/HCl CH2-O
707	Willson	162610 172610	FF, Rp, Fm	2	DM	Cl/HCl CH2-O
708	Willson	302610/R/S/SR/SS/SSS S302610/R/S/SR/SS/SSS	ON, Rp, Bm	2	DM	Cl/HCl CH2-O
709	Willson	312610 322610	FF, Rp, Bm	2	DM	Cl/HCl/ CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
710	Willson	352610 352610R 352610SS	ON, Rp, Bm	2	DM	Cl/HCl/ CH2-O
711	Willson	122617/R/S/SR/SS/SSS S122617/R/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	Cl/HCl CH2-O
712	Willson	162617 172617	FF, Rp, Fm	2	DFM	Cl/HCl CH2-O
713	Willson	152617 152617R 152617SS	FF, Rp, Fm	2	DFM	Cl/HCl CH2-O
714	Willson	302617/R/S/SR/SS/SSS S302617/R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	Cl/HCl CH2-O
715	Willson	312617 322617	FF, Rp, Bm	2	DFM	Cl/HCl/ CH2-O
716	Willson	352617 352617R 352617SS	ON, Rp, Bm	2	DFM	Cl/HCl CH2-O
717	Willson	122517/R/S/SR/SS/SSS S122517/R/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	Cl/HCl/OV
718	Willson	162517 172517	FF, Rp, Fm	2	DFM	Cl/HCl/OV
719	Willson	152517 152517R 152517SS	ON, Rp, Fm	2	DFM	Cl/HCl/OV

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
720	Willson	302517/R/S/SR/SS/SSS S302517/R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	Cl/HCl/OV
721	Willson	312517 322517	FF, Rp, Bm	2	DFM	Cl/HCl/OV
722	Willson	352517 352517R 352517SS	ON, Rp, Bm	2	DFM	Cl/HCl/OV
736	Willson	6105S 6105M 6105L	ON,Rp,Fm	2		OV/Cl/HCl
740	Willson	6205S 6205M 6205L	ON,Rp,Fm	1		OV/Cl/HCl
741	Willson	6106S 6106M 6106L	ON,Rp,Fm	2		Cl/HCl CH2-O
742	Willson	6206S 6206M 6206L	ON,Rp,Fm	1		Cl/HCl CH2-O
745	Willson	6405 S6405 6505 S6505	FF,Rp,Fm	2		OV/Cl/HCl
746	Willson	6406 S6406 6506 S6506	FF,Rp,Fm	2		Cl/HCl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
748	Willson	6515 S6515 6415 S6415	FF,Rp,Fm	2	DM	OV/Cl/HCl
749	Willson	6516 S6516 6416 S6416	FF,Rp,Fm	2	DM	Cl/HCl CH2-O
753	Willson	6115S 6115M 6115L	ON,Rp,Fm	2	DM	OV/Cl/HCl
754	Willson	6116S 6116M 6116L	ON,Rp,Fm	2	DM	OV/Cl/HCl
756	Willson	6215S 6215M 6215L	ON,Rp,Fm	1	DM	OV/Cl/HCl
757	Willson	6216S 6216M 6216L	ON,Rp,Fm	1	DM	Cl/HCl CH2-O
763	Willson	6145S 6145M 6145L	Rp,Fm,ON	2	HA	OV/Cl/HCl
764	Willson	6445 S6445 6545 S6545	Rp,Fm,FF	2	HA	OV/Cl/HCl
765	Willson	6146S 6146M 6146L	Rp,Fm,ON	2	HA	Cl/HCl CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
766	Willson	6546 S6546 6446 S6446	Rp,Fm,FF	2	HA	Cl/HCl CH2-O
768	Scott	66STC-AG S66STC-AG 66MTC-AG S66MTC-AG 66LTC-AG S66LTC-AG	Fm,Rp,ON	2		HCl/Cl CH2-O
769	Scott	66STC-AG-D S66STC-AG-D 66MTC-AG-D S66MTC-AG-D 66LTC-AG-D S66LTC-AG-D	Fm,Rp,ON	2	DM	HCl/Cl CH2-O
770	Scott	66STC-AG-F S66STC-AG-F 66MTC-AG-F S66MTC-AG-F 66LTC-AG-F S66LTC-AG-F	Fm,Rp,ON	2	DFMR	HCl/Cl CH2-O
771	Scott	66STC-AG-H S66STC-AG-H 66MTC-AG-H S66MTC-AG-H 66LTC-AG-H S66LTC-AG-H	Fm,Rp,ON	2	H,R,A	HCl/Cl CH2-O
776	Scott	66STC-OA S66STC-OA 66MTC-OA S66MTC-OA 66LTC-OA S66LTC-OA	Fm,Rp,ON	2		HCl/Cl/OV CH2-O

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
777	Scott	66STC-OA-D S66STC-OA-D 66MTC-OA-D S66MTC-OA-D 66LTC-OA-D S66LTC-OA-D	Fm,Rp,ON	2	DM	HCl/Cl/OV CH2-O
778	Scott	66STC-OA-F S66STC-OA-F 66MTC-OA-F S66MTC-OA-F 66LTC-OA-F S66LTC-OA-F	Fm,Rp,ON	2	DFMR	HCl/Cl/OV CH2-O
779	Scott	66STC-OA-H S66STC-OA-H 66MTC-OA-H S66MTC-OA-H 66LTC-OA-H S66LTC-OA-H	Fm,Rp,ON	2	HRA	HCl/Cl/OV CH2-O
787	Willson	6125S 6125M 6125L	Rp,Fm,ON	2	DFMR	OV/Cl/HCl
788	Willson	6425 S6425 6525 S6525	Rp,Fm,FF	2	DFMR	OV/Cl/HCl
789	Willson	6126S 6126M 6126L	Rp,Fm,ON	2	DFMR	OV/Cl/HCl
790	Willson	6426 S6426 6526 S6526	Rp,Fm,FF	2	DFMR	OV/Cl/HCl

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
794	AO	S7553HE S7553HEC	FF,Rp,Fm	2 For S7553HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	HRA	HCl/Cl CLO2
798	AO	S7552A S7552AC	FF,Rp,Fm	2 For S7552AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		Cl/HCl
799	AO	S7553A S7553AC	FF,Rp,Fm	2 For S7553AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		OV/HCl/Cl CLO2
803	AO	S7552HE S7552HEC	FF,Rp,Fm	2 For S7552HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	H,R,A	HCl/Cl
805	AO	S7570A S7570AC	FF,Rp,Fm	2 For S7570AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		OV/HCl/Cl CLO2
808	AO	S7552AD S7552ADC	FF,Rp,Fm	2 For S7552ADC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	D,M,	HCl/Cl CLO2

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
809	AO	S7553AD S7553ADC	FF,Rp,Fm	2 For S7553ADC Comb. Type C, CF Hose Length feet: 25 - 300	D,M, Press. Range psig: 14 - 37	OV/HCl/Cl CLO2
812	AO	S75563A S75563AC	FF,Rp,Fm	2 For S75563AC Comb. Type C, CF Hose Length feet: 25 - 300	D,F,M Press. Range psig: 14 - 37	OV/HCl/Cl CLO2
817	Glendale	GR9522	Rp,Fm,ON	2		HCl/Cl
818	Glendale	GR9522-10	Rp,Fm,ON	2	DM	HCl/Cl
819	Glendale	GR9522-50	Rp,Fm,ON	2	HRA	HCl/Cl
820	Glendale	GR9523	Rp,Fm,ON	2		OV/HCl/Cl
821	Glendale	GR9523-10	Rp,Fm,ON	2	DM	OV/HCl/Cl
822	Glendale	GR9523-50	Rp,Fm,ON	2	HRA	OV/HCL/CL
828	Willson	6225S 6225M 6225L	Rp,Fm,ON	1	DFM	OV/HCl/Cl
829	Willson	6226S 6226M 6226L	Rp,Fm,ON	1	DFM	HCl/Cl CH2-0

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
832	MSA	484475	FF,Rp,Fm	2	DM	HCl/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
833	MSA	484476	FF,Rp,Fm	2	DM	OV/HCl/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
836	MSA	484480	FF,Rp,Fm	2	HA	HCl/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
837	MSA	484488	FF,Rp,Fm	2	DM	HCl/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
839	MSA	484481	FF,Rp,Fm	2	HA	OV/HCl/Cl CH2-O
				Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85		
843	MSA	483992	Rp,Fm,FF	2	DM	Cl/HCl CH2-O
				Comb. Type C, CF Hose Length (feet): 8-300 Press. Range psig: 35 - 40		

CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
844	MSA	483993	Rp,Fm,FF	2	DM	OV/Cl/HCl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
851	MSA	483997	Rp,Fm,FF	2	HA	Cl/HCl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
852	MSA	484005	Rp,Fm,FF	2	DM	OV/Cl/HCl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
853	MSA	483999	Rp,Fm,FF	2	DFMR	OV/Cl/HCl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	
854	MSA	483998	Rp,Fm,FF	2	HRA	OV/Cl/HCl CH2-O
				Comb. Type C, CF Hose Length (feet) 8-300	Pressure psig 35 - 40	

6. Organic Vapor

Approval

Approved as respiratory protection against not more than 1000 parts per million organic vapors by volume.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

Do not wear for protection against organic vapors with poor warning properties or those that generate high heats of reaction.

Maximum use concentrations will be lower than 1000 parts per million organic vapors where that concentration produces atmospheres immediately dangerous to life or health.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
40	MSA	459433 461005 460852	Rp,Fm,Bm, ON	2	DM	
49	North	7501* 7501S 7501M 7501L 7701S 7701M 7701L	Rp,Fm, ON	2		
50	Willson	1221 1221 1221R 1221S 1221SR 1221SS 1221SSS S1221 S1221R S1221S S1221SR S1221SS S1221SSS	Rp,Fm, ON	2		
51	Willson	122110 122110R 122110S 122110SR 122110SS 122110SSS S122110 S122110R S122110SSS S122110SS S122110S S122110SR	Rp,Fm, ON	2	DM	

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
52	Willson	122113 122113R 122113S 122113SR 122113SS 122113SSS S122113 S12213R S122113S S122113SR S122113SS S122113SSS	Rp,Fm, ON	2	DFM	
54	Willson	122115 122115R 122115S 122115SR 122115SS 122115SSS S122115 S122115R S122115S S122115SR S122115SS S122115SSS	Rp,Fm, ON	2	DM	PLE/Pest
56	AO	R4051* R5051* R6051*	Rp,Fm, ON	2		
59	DeVilbiss	MSE-502* MSE-502-1*	Rp,Fm, ON	2		
65	North	7503* 7503S 7503M 7503L 7703S 7703M 7703L	Rp,Fm, ON	2		SO2/HCl Cl/CH2-O

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
66	North	7513* 7513S 7513M 7513L 7713S 7713M 7713L	Rp,Fm, ON	2	DM	SO2/HCl Cl/CH2-O
73	North	7511* 7511S 7511M 7511L 7711S 7711M 7711L	Rp,Fm, ON	2	DM	
74	North	7549* 7549M 7549L 7749S 7749M 7749L	Rp, Fm, ON	2		Pest
75	North	7531* 7531M 7531S 7531L 7731S 7731M 7731L	Rp,Fm, ON	2		PLE
75	Acme	27*	Rp,Fm, ON	2		PLE
76	Willson	1225 S1225 1225S S1225S 1225SR S1225SR S1225R S1225SS S1225SSS 1225SSS 1225R 1225SS	Rp,Fm, ON	2		SO2/HCl Cl

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
77	Willson	122510 122510R 122510S 122510SS 122510SSS S122510 S122510R 122510SR S122510S S122510SS S122510SR S122510SSS	Rp,Fm, ON	2	DM	SO2/HCl Cl
79	MSA	448848 461009	Rp,Fm,Bm, ON	2	DM	PLE/Pest
80	MSA	448849 460853 462241 466249 466250 466251 466255 466528 466529 468015 468016 468017 468018 476726 476727 476728 479704 thru 479712 479714 thru 479722	Rp,Fm,Bm, ON	2	DM	PLE
81	Pulmosan	C256* 10009 10183 10219 10270	Rp,Fm, ON	1		
82	AO	R4053* R5053* R6053*	Rp,Fm, ON	2		SO2/HCl/ Cl

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
83	AO	R4055 S4055 R5055 S5055 R6055 S6055	Rp,Fm, ON	2	DM	
84	AO	R8151 S8151	Rp,Fm, ON	1		
85	AO	R8153* S8153*	Rp,Fm, ON	1		SO2/HCl Cl
86	Binks	40-129*	Rp,Fm, ON	2		
87	Binks	40-128 40-141 40-143 40-196 40-197 40-198	Rp,Fm, ON	2	DM	PLE
88	Glendale	GR1621 GR2021 GR4021 GR8021	Rp,Fm, ON	2		
89	Glendale	GR1621-10 GR2021-10 GR4021-10 GR8021-20	Rp,Fm, ON	2	DM	
90	Glendale	GR1621-20* GR1621-60 GR2021-20* GR2021-60 GR4021-20* GR4021-60 GR8021-20* GR8021-60	Rp,Fm, ON	2		PLE

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
91	Pulmosan	C259* 10024 10198 10222 10282	Rp,Fm, ON	1	DM	
92	AO	R8191P* S8191P*	Rp,Fm, ON	1	DM	PLE
93	AO	R8151P S8151P	Rp,Fm, ON	1	DM	PLE
94	AO	R4051P* R5051P* R6051P*	Rp,Fm, ON	2	DM	PLE
96	DeVilbiss	MSP-505* MSP-505-1*	Rp,Fm, ON	2	DM	PLE
97	AO	R4091P S4091P R5091P S5091P R6091P S6091P	Rp,Fm, ON	2	DM	PLE
99	Cesco	94R40*	Rp,Fm, ON	2		
100	Pulmosan	C-251* 10006 10180 10225 10267 11030	Rp,Fm, ON	1		PLE
100	Fibre Metal	C-251* 10180*	Rp,Fm, ON	1		PLE
100	Shoplyne	10006 10267 10180 10225	Rp,FM, ON	1		PLE

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
101	North	7401L* 7401M*	Rp,Fm, ON	1		
102	North	75BP01* 75BP01M 75BP01L	Rp,Bm, ON	2		
103	North	75BP11* 75BP11M 75BP11L	Rp,Bm, ON	2	DM	
104	North	75BP03* 75BP03M 75BP03L	Rp,Bm, ON	2		SO2/HCl Cl/CH2-O
105	North	75BP13* 75BP13M 75BP13L	Rp,Bm, ON	2	DM	SO2/HCl Cl/CH2-O
106	AO	R4058 S4058 R5058 S5058 R6058 S6058	Rp,Fm, ON	2	DFM	Pest
107	Protech	1482-G100 1482-L-G100 1482-S-G100 1585S-G100 1585-G100 1585L-G100	Rp,Fm, ON	2		
107	Sellstrom	315-G100	Rp,Fm, ON	2		
107	Eastern	E451	Rp,Fm, ON	2		
107	Safe-Tex	236-G100*	Rp,Fm, ON	2		
113	Scott	6411-0013* 6412-0013* 6413-0013* 6421-0013* 6422-0013*	Rp,Fm, ON	2		

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
113 Cont.		6423-0013* 64-OV 64E-OV 64M-OV 64ME-OV 64S-OV 64SE-OV				
114	Scott	6411-0113* 6412-0113* 6413-0113* 6421-0113* 6422-0113* 6423-0113* 64-OV-D 64E-OV-D 64M-OV-D 64ME-OV-D 64S-OV-D 64SE-OV-D	Rp,Fm, ON	2	DM	
117	Scott	6412-0313* 6422-0313* 6411-0313* 6413-0313* 6421-0313* 6423-0313* 64-OVP 64E-OVP 64M-OVP 64ME-OVP 64S-OVP 64SE-OVP	Rp,Fm, ON	2	DFMR	PLE/Pest
118	US Safety	150T20 150L20	Fm, ON	2		
119	Cesco	95RC25 95SMRC25	Fm, ON	2		
120	US Safety	150T23 150L23	Rp,Fm, ON	2	DM	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
121	Cesco	95RC45 95SMRC45	Rp,Fm, ON	2	DM	
123	3M	8712 8734 8741 8751	Su, ON	1	DM 8734, 8741, 8751 only	PLE/Pest
124	Protech	1482-G100-F102 1482-S-G100-F102 1482-L-G100-F102 1585S-G100-F102 1585-G100-F102 1585L-G100-F102	Rp,Fm, ON	2		PLE
124	Eastern	E454	Rp,Fm, ON	2		PLE
124	Sellstrom	315-G100-F102	Rp,Fm, ON	2		PLE
124	Safe-Tex	236-G100-F102*	Rp,Fm, ON	2		PLE
125	US Safety	150T24	Rp,Fm, ON	2		PLE
126	Cesco	95RC35	Rp,Fm, ON	2		PLE
127	Stewart-Warner	7931*	Rp,Fm, ON	2		PLE
128	Northcott	70-450*	Rp,Fm, ON	2		PLE
130	Willson	1621 1721	Rp,Fm, FF	2		
131	Willson	162113 172113	Rp,Fm, FF	2	DMF	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
133	Willson	162115 172115	Rp,Fm, FF	2	DM	PLE/Pest
134	Willson	162110 172110	Rp,Fm, FF	2	DM	
141	Willson	1625 1725	Rp,Fm, FF	2		SO2/HCl Cl
142	Willson	162510 172510	Rp,Fm, FF	2	DM	SO2/HCl Cl
144	MSA	461848 483480	Rp,Fm, FF	2	DM	
146	MSA	461850 483482	Rp,Fm, FF	2	DM	SO2/HCl CH2-O/Cl
149	MSA	461846 466256 466257 471726 471727 480386 480387 480388 483496	Rp,Fm, FF	2	DM	PLE
151	MSA	461852 483484	Rp,Fm, FF	2	DM	
153	MSA	461855 483487	Rp,Fm, FF	2	HA	SO2/HCl CH2-O/Cl
154	MSA	461856 483488	Rp,Fm, FF	2	DFMR	SO2/HCl CH2-O/Cl
155	MSA	461853 483485	Rp,Fm, FF	2	HA	PLE CH2-O/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
157	MSA	460965 462238	Rp,Fm,Bm, ON	2	DM	
159	MSA	460847 461013	Rp,Fm,Bm, ON	2	HA	SO2/HCl CH2-O/Cl
160	MSA	460848 461014	Rp,Fm,Bm, ON	2	DFMR	SO2/HCl CH2-O/Cl
161	MSA	460846 461012	Rp,Fm,Bm, ON	2	HA	PLE/Pest
163	Protech	1482-G104 1482-S-G104 1482-L-G104 1482-G104-F100 1482-S-G104-F100 1482-L-G104-F100 1585S-G104 1585-G104 1585L-G104 1585S-G104-F104 1585-G104-F104 1585L-G104-F104	Rp,Fm, ON	2	DMZ 1482-G104-F100 only 1482-S-G104-F100 only 1482-L-G104-F100 only 1585-G104-F100 only 1585S-G104-F100 only 1585L-G104-F100 only	SO2/HCl Cl
163	Sellstrom	315-G104 315-G104-F100	Rp,Fm, ON	2	DMZ	SO2/HCl Cl
163	Eastern	E452	Rp,Fm, ON	2	DMZ	SO2/HCl Cl
166	Cesco	95RC85 95SMRC85	Fm, ON	2		SO2/HCl Cl
167	Cesco	95RC105 95SMRC105	Rp,Fm, ON	2	DM	SO2/HCl Cl
170	US Safety	150T26 150L26	Fm, ON	2		SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
171	US Safety	150T28 150L28	Rp,Fm, ON	2	DM	SO2/HCl Cl
172	Scott	6411-0015* 6412-0015* 6413-0015* 6421-0015* 6422-0015* 6423-0015* 64-OA 64E-OA 64M-OA 64ME-OA 64S-OA 64SE-OA 604032-15*	Fm, ON	2		SO2/HCl CH2-O/Cl
174	Scott	6411-0115* 6412-0115* 6413-0115* 6421-0115* 6422-0115* 6423-0115* 64-OA-D 64E-OA-D 64M-OA-D 64ME-OA-D 64S-OA-D 64SE-OA-D	Fm, ON	2	DM	SO2/HCl CH2-O/Cl
175	North	75BP31* 75BP31M 75BP31L	Rp,Bm, ON	2		PLE
178	North	75BP49* 75BP49M 75BP49L	Rp, Bm, ON	2		Pest
180	North	7601 7601S 7601N* 7601SN*	Rp,Fm, FF	2		

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
181	North	7603 7603S 7603N* 7603SN*	Rp,Fm, FF	2		SO2/HCl Cl/CH2-O
185	North	7611 7611S 7611N* 7611SN*	Rp,Fm, FF	2	DM	
186	North	7613 7613S 7613N* 7613SN*	Rp,Fm, FF	2	DM	SO2/HCl Cl/CH2-O
188	North	7631 7631S 7631N* 7631SN*	Rp,Fm, FF	2		PLE
190	North	7649 7649S 7649N* 7649SN*	Rp, Fm, FF	2		Pest
196	3M	8723 8724	Su, ON	1	DM 8724 only	Cl
198	US Safety	150T30*	Fm, ON	2		Pest
199	Cesco	95RC125*	Fm, ON	2		Pest
201	MSA	465986 466239 466240 466241 466526 466527	Rp,Fm, ON	2	DM	PLE

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
202	Protech	1482-G100-F104 1482-S-G100-F104 1482-L-G100-F104 1585S-G100-F104 1585-G100-F104 1585L-G100-F104	Rp,Fm, ON	2	DM	Pest
202	Eastern	E455	Rp,Fm, ON	2	DM	PLE
202	Sellstrom	315-G100-F104	Rp,Fm, ON	2	DM	PLE
204	North	7581M 7781M 7581S 7781S 7581L 7781L 7581*	Rp,Fm, ON	2	HRA	PLE
205	North	75BP81* 75BP81M 75BP81L	Rp,Bm, ON	2	HRA	PLE
206	North	7681 7681S	Rp,Fm, FF	2	HRA	PLE
210	North	7583M 7783M 7583S 7783S 7583L 7783L 7583*	Rp,Fm, ON	2	HRA	SO2/HCl Cl/CH2-O
211	North	75BP83* 75BP83M 75BP83L	Rp,Bm, ON	2	HRA	SO2/HCl Cl/CH2-O
212	North	7683S 7683	Rp,Fm, FF	2	HRA	SO2/HCl Cl/CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
216	3M	8725 8726	Su, ON	1	DM 8726 only	SO2/HCl Cl
219	Scott	6470-0013* 6480-0013* 65-OV 65S-OV 65XL-OV	Rp,Fm, FF	2		
220	Scott	6470-0113* 6480-0113* 65-OV-D 65S-OV-D 65XL-OV-D	Rp,Fm, FF	2	DM	
221	Scott	6470-0015* 6480-0015* 65-OA 65S-OA 65XL-OA	Rp,Fm, FF	2		SO2/HCl CH2-O/Cl
222	Scott	6470-0115* 6480-0115* 65-OA-D 65S-OA-D 65XL-OA-D	Rp,Fm, FF	2	DM	SO2/HCl CH2-O/Cl
224	Scott	6470-0313* 6480-0313* 65-OVP 65S-OVP 65XL-OVP	Rp, Fm, FF	2	DFMR	PLE/Pest
234	AO	R7053*	Rp,Fm, FF	2		SO2/HCl Cl
236	AO	R7051*	Rp,Fm, FF	2		
237	AO	R7055 S7055	Rp,Fm, FF	2	DM	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
238	AO	R7058 S7058	Rp,Fm, FF	2	DMF	Pest
239	AO	R7051P*	Rp,Fm, FF	2		PLE
240	AO	R7091P S7091P	Rp,Fm, FF	2	DM	PLE
241	Glendale	GR-1623 GR-2023 GR-4023 GR-8023	Rp,Fm, ON	2		SO2/HCl Cl
242	Glendale	GR1623-10 GR2023-10 GR4023-10 GR8023-10	Rp,Fm, ON	2	DM	SO2/HCl Cl
243	MSA	466165	Rp,Fm, ON	2	HA	
244	MSA	466163	Rp,Bm, ON	2	HA	
245	MSA	466164 483493	Rp,Fm, FF	2	HA	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
250	Scott	6411-0315* 6412-0315* 6413-0315* 6421-0315* 6422-0315* 6423-0315* 64-OA-F 64M-OA-F 64ME-OA-F 64E-OA-F 64S-OA-F 64SE-OA-F	Rp,Fm, ON	2	DFMR	SO2/HCl CH2-O/Cl
251	Scott	6470-0315* 6480-0315* 65-OA-F 65S-OA-F 65XL-OA-F	Rp,Fm, FF	2	DFMR	SO2/HCl CH2-O/Cl
258	Willson	122116 122116R 122116S 122116SR 122116SS 122116SSS S122116 S122116R S122116S S122116SS S122116SSS S122116SR	Rp,Fm, ON	2	DM	PLE
259	Willson	162116 172116	Rp,Fm, FF	2	DM	PLE
260	MSA	466903	Rp,Fm, ON	2	DM	SO2/HCl CH2-O/Cl
261	MSA	466902	Rp,Bm, ON	2	DM	SO2/HCl CH2-O/Cl
262	MSA	466904 483494	Rp,Fm, FF	2	DM	SO2/HCl CH2-O/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
263	Cesco	96RC45	Rp,Fm, FF	2	DM	
264	US Safety	151T23	Rp,Fm, FF	2	DM	
267	Cesco	96RC105	Rp,Fm, FF	2	DM	SO2/HCl Cl
268	US Safety	151T28	Rp,Fm, FF	2	DM	SO2/HCl Cl
271	Cesco	96RC35*	Rp,Fm, FF	2		PLE
272	US Safety	151T24*	Rp,Fm, FF	2		PLE
275	Protech	1482-G100-F108 1482-S-G100-F108 1482-L-G100-F108	Rp,Fm, ON	2	DFM	
276	Protech	1482-G100-F100 1482-S-G100-F100 1482-L-G100-F100	Rp,Fm, ON	2	DM	
277	DeVilbiss	MSP-507	Rp,Fm, ON	1		
278	DeVilbiss	MSP-506	Rp,Fm, ON	1	DM	PLE
281	AO	R4563 S4563 R5563 S5563 R6563 S6563	Rp,Fm, ON	2	DFM	SO2/HCl ClO2/Pest Cl
282	AO	R7563 S7563	Rp,Fm, FF	2	DFM	SO2/HCl ClO2/Pest Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
285	MSA	468023 468024 468025 471728 471729	Rp, FM, FF	2	DM	PLE
286	MSA	468026 468027 468028 468029 468030 468031	Rp, BM, ON	2	DM	PLE
287	Survivair	2101-00 2301-00 2201-00	Rp, FM, ON	2		
293	Willson	1231 1231R 1231S 1231SR 1231SS 1231SSS S1231 S1231R S1231S S1231SR S1231SS S1231SSS	Rp, FM, ON	2		
294	Willson	123112 123112R 123112S 123112SR 123112SS 123112SSS S123112 S123112R S123112S S123112SR S123112SS S123112SSS	Rp, FM, ON	2	HA	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
295	Willson	1631 1731	Rp, FM, FF	2		
296	Willson	163112 173112	Rp, FM, FF	2	HA	
297	3M	8729	SU, ON	1		
298	Willson	1235 1235R 1235S 1235SR 1235SSS 1235SS S1235 S1235R S1235S S1235SR S1235SS S1235SSS	Rp, Fm, ON	2		SO2/HCl Cl
299	Willson	123512 123512R 123512S 123512SR 123512SS 123512SSS S123512 S123512R S123512S S123512SR S123512SS S123512SSS	Rp, FM, ON	2	HA	SO2/HCl Cl
300	Willson	1635 1735	Rp, FM, FF	2		SO2/HCl Cl
301	Willson	163512 173512	Rp, FM, FF	2	HA	SO2/HCl Cl
302	Cesco	95RC20 95SMRC20	Rp, FM, ON	2	HRA	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
303	US Safety	150T40 150L40	Rp, FM, ON	2	HRA	
304	Cesco	96RC20	Rp,FM, FF	2	HRA	
305	US Safety	151T40	Rp, FM, FF	2	HRA	
310	Cesco	95RC80 95SMRC80	Rp, FM, ON	2	HRA	SO2/HCl Cl
311	US Safety	150T46 150L46	Rp, FM, ON	2	HRA	SO2/HCl Cl
312	Cesco	96RC80	Rp, FM, FF	2	HRA	SO2/HCl Cl
313	US Safety	151T46	Rp, FM, FF	2	HRA	SO2/HCl Cl
318	Survivair	2203-00 2103-00 2303-00	Rp, FM, ON	2		SO2/HCl CH2-O/Cl
320	Pulmosan	10015 10189 10243 10276	Rp, FM, ON	1		SO2/HCl Cl
321	Survivair	2221-00 2121-00 2321-00	Rp, FM, ON	2	DM	PLE
322	Survivair	2211-00 2111-00 2311-00	Rp, FM , ON	2	DM	
323	Survivair	2131-00* 2231-00* 2331-00*	Rp, FM, ON	2	DFMR	Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
324	Pulmosan	10030 10255 10204 10288	Rp, FM, ON	1	DM	SO2/HCl Cl
325	AO	R4051A S4051A R5051A S5061A R6051A S6051A R5551A S5551A R6551A S6551A	Rp, FM , ON	2		
326	AO	R7051A S7051A R7751A S7751A	Rp, FM , FF	2		
327	AO	R4051AD S4051AD R5051AD S5051AD R6051AD S6051AD R5551AD S5551AD R6551AD S6551AD	Rp, FM, ON	2	DM	
328	AO	R7051AD S7051AD R7751AD S7751AD	Rp, FM, FF	2	DM	
333	AO	R4051AP S4051AP R5051AP S5051AP R6051AP	Rp, FM, ON	2	DM	PLE

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
333 Cont.		S6051AP R5551AP S5551AP R6551AP S6551AP				
334	AO	R7051AP S7051AP R7751AP S7751AP	Rp, FM, FF	2	DM	PLE
335	DeVilbiss	MSP-508 MSP-9508	Rp, FM, ON	2	DM	PLE
336	US Safety	150T35 150L35	Rp,Fm, ON	2	DFMR	PLE/Pest
337	Cesco	95RC115 95SMRC115	Rp,Fm, ON	2	DFMR	PLE/Pest
338	US Safety	151T35	Rp,Fm, FF	2	DFMR	PLE/Pest
343	AO	R4053A S4053A R5053A S5053A R6053A S6053A R5553A S5553A R6553A S6553A	Rp,Fm, ON	2		SO2/HCl ClO2/Cl
344	AO	R7053A 57053A R7753A S7753A	Rp,Bm, FF	2		SO2/HCl ClO2/Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
345	AO	R4053AD S4053AD R5053AD S5053AD R6053AD S6053AD R5553AD S5553AD R6553AD S6553AD	Rp,Fm, ON	2	DM	SO2/HCl ClO2/Cl
346	AO	R7053AD S7053AD R7753AD S7753AD	Rp,Fm, FF	2	DM	SO2/HCl ClO2/Cl
348	Cesco	96RC115	Rp,Fm, FF	2	DFM	PLE/Pest
349	North	10001S 10001M	Su, ON	1		
351	Survivair	3201-00 4201-00	Rp,Fm, FF	2		
352	North	10003S 10003M	Su, ON	1		SO2/HCl Cl/CH2-O
354	North	10041S 10041M	Su, ON	1	DM	PLE/Pest
355	North	10011S 10011M	Su, ON	1	DM	
357	North	10013S 10013M	Su, ON	1	DM	SO2/HCl Cl/CH2-O

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
360	Willson	3021 3021R 3021S 3021SR 3021SS 3021SSS S3021 S3021S S3021R S3021SR S3021SS S3021SSS	Rp,Bm, ON	2		
361	Willson	3121 3221	Rp, Bm, FF	2		
362	Willson	3031 3031R 3031S 3031SR 3031SS 3031SSS S3031 S3031R S3031S S3031SR S3031SS S3031SSS	Rp, Bm, ON	2		
363	Willson	3131 3231	Rp, Bm, FF	2		
368	Willson	3025 3025R 3025S 3025SR 3025SS 3025SSS S3025 3025R S3025R S3025S S3025SS S305SSS	Rp,Bm, ON	2		SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
369	Willson	3125 3225	Rp, Bm, FF	2		SO2/HCl Cl
370	Willson	3035 3035R 3035S 3035SR 3035SS 3035SSS S3035 S3035S S3035R S3035SR S3035SS S3035SSS	Rp, Bm, ON	2		SO2/HCl Cl
371	Willson	3135 3235	Rp,Bm, FF	2		SO2/HCl Cl
373	Stewart Warner	7931+	Rp, Fm, ON	2	DFMR	PLE/Pest
374	Willson	302115 302115R 302115S 302115SR 302115SS 302115SSS S302115 S302115R S302115S S302115SR S302115SS S302115SSS	Rp, Bm, ON	2	DM	PLE/Pest
375	Willson	312115 322115	Rp, Bm, FF	2	DM	PLE/Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
376	Willson	302116 302116R 302116S 302116SR 302116SS 302116SSS S302116 S302116R S302116S S302116SR S302116SS S302116SSS	Rp, Bm, ON	2	DM	PLE
377	Willson	312116 322116	Rp, Bm, FF	2	DM	PLE
380	Willson	302510 302510R 302510S 302510SR 302510SS 302510SSS S302510 S302510R S302510S S302510SR S302510SS S302510SSS	Rp,Bm, ON	2	DM	SO2/HCl Cl
381	Willson	312510 322510	Rp,Bm, FF	2	DM	SO2/HCl Cl
382	Willson	303112 S303112 303112R S303112R 303112S S303112S 303112SR S303112SR S303112SS S303112SSS 303112SS 303112SSS	Rp,Bm, ON	2	HA	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
383	Willson	313112 323112	Rp,Bm, FF	2	HA	
386	Willson	303512 303512R 303512S 303512SR 303512SS 303512SSS S303512 S303512S S303512R S303512SR S303512SS S303512SSS	Rp,Bm, ON	2	HA	SO2/HCl Cl
387	Willson	313512 323512	Rp,Bm, FF	2	HA	SO2/HCl Cl
388	Willson	312110 322110	Rp,Fm, FF	2	DM	
389	Willson	302110 302110R 302110S 302110SR 302110SS 302110SSS S302110 S302110R S302110S S302110SR S302110SS S302110SSS	Rp,Bm, ON	2	DM	
390	Willson	312113 322113	Rp,Bm, FF	2	DFM	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
391	Willson	302113 302113R 302113S 302113SR 302113SS 302113SSS S302113 S302113S S302113R S302113SR S302113SS S302113SSS	Rp,Bm, ON	2	DFM	
392	Northcott	70-450+	Rp,Fm, ON	2	DFMR	PLE/Pest
393	Survivair	2133-00* 2233-00* 2333-00*	Rp,Fm, ON	2	DFMR	SO2/HCl Cl
394	Survivair	3233-00*	Rp,Fm, FF	2	DFMR	SO2/HCl Cl
404	Glendale	GR7021	Rp,Fm, FF	2		
405	Glendale	GR7021-10	Rp,Fm, FF	2	DM	
406	Glendale	GR7021-20 GR7021-60	Rp,Fm, FF	2		PLE
410	Glendale	GR7023	Rp,Fm, FF	2		SO2/HCl Cl
411	Glendale	GR7023-10	Rp,Fm, FF	2	DM	SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
413	AO	R4051HE S4051HE R5051HE S5051HE R6051HE S6051HE R5551HE S5551HE R6551HE S6551HE	Rp,Fm, ON	2	HRA	Pest/PLE
414	AO	R7051HE S7051HE R7751HE S7751HE	Rp,Fm, FF	2	HRA	Pest/PLE
417	AO	R4053HE S4053HE R5053HE S5053HE R6053HE S6053HE R5553HE S5553HE R6553HE S6553HE	Rp,Fm, ON	2	HRA	SO2/HCl ClO2/Pest Cl
418	AO	R7053HE S7053HE R7753HE S7753HE	Rp,Fm, FF	2	HRA	SO2/HCl ClO2/Pest Cl
421	Protech	1482-G104-G208 1482-S-G104-G208 1482-L-G104-G208 1585S-G104-G208 1585-G104-G208 1585L-G104-G208	Rp,Fm, ON	2	HRA	SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
424	AO	R4051E R5051E R6051E	Rp,Fm, ON	2		
425	AO	R7051E	Rp,Fm, FF	2		
426	AO	R4051EP R5051EP R6051EP	Rp,Fm, ON	2	DMZ	PLE
427	AO	R7051EP	Rp,Fm, FF	2	DMZ	PLE
428	DeVilbiss	MSL-500	Rp,Fm, ON	2	DMZ	PLE
433	Survivair	2113-00 2213-00 2313-00	Rp,Fm, ON	2	DM	SO2/HCl CH2-O/Cl
434	Survivair	3213-00 4213-00	Rp,Fm, ON	2	DM	SO2/HCl CH2-O/Cl
435	3M	7201	Rp,Fm, ON	2		
436	3M	7210	Rp,Fm, ON	2	DM	PLE
437	3M	7207	Rp,Fm, ON	2	DM	
438	3M	7212	Rp,Fm, ON	2	HRA	
446	3M	7203	Rp,Fm, ON	2		SO2/HCl Cl
447	3M	7209	Rp,Fm, ON	2	DM	SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
448	3M	7214	Rp,Fm, ON	2	HRA	SO2/HCl Cl
450	Survivair	2193-00 2293-00 2393-00	Rp,Fm, ON	2	HA	SO2/HCl Cl
451	Survivair	3293-00 4293-00	Rp,Fm, FF	2	HA	SO2/HCl Cl
452	Survivair	2191-00 2291-00 2391-00	Rp,Fm, ON	2	HA	
453	Survivair	3291-00 4291-00	Rp,Fm, FF	2	HA	
454	Survivair	3203-00 4203-00	Rp,Fm, FF	2		SO2/HCl CH2-O/Cl
455	Survivair	3221-00 4221-00	Rp,Fm, FF	2	DM	PLE
456	Survivair	3231-00*	Rp,Fm, FF	2	DFMR	Pest
458	Protech	1482-G100-G208 1482-L-G100-G208 1482-S-G100-G208 1585S-G100-G208 1585-G100-G208 1585L-G100-G208	Rp,Fm, ON	2	HRA	
460	MSA	472748	Rp,Bm, ON	2	DM	
462	MSA	472750	Rp,Bm, ON	2	DM	SO2/HCl CH2-O/Cl

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
464	MSA	472752	Rp,Bm, ON	2	DM	Pest
465	MSA	472755	Rp,Bm, ON	2	HA	PLE/Pest
466	MSA	472756	Rp,Bm, ON	2	HA	SO2/HCl CH2-O/Cl
467	MSA	472757	Rp,Bm, ON	2	DFMR	SO2/HCl CH2-O/Cl
469	MSA	472759	Rp,Bm, ON	2	DM	
471	MSA	472761	Rp,Bm, ON	2	HA	
472	MSA	472764	Rp,Bm, ON	2	DM	SO2/HCl CH2-O/Cl
473	MSA	472736 472737 472738 479926 thru 479931	Rp,Bm, ON	2	DM	PLE
474	MSA	472739 472740 472741 480055 thru 480063	Rp,Bm, ON	2	DM	PLE
476	Racal	BE1/A	PAPR, HH	3		
477	Racal	BE5/A	PAPR, HH	3		
478	Racal	BE6/A	PAPR, HH	3		
482	Racal	BE1/A-P3	PAPR, HH	3	HRA	Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
483	Racal	BE3/A-P3 BE7/A-P3	PAPR, FF	3	HRA	Pest
484	Racal	BE5/A-P3	PAPR, HH	3	HRA	Pest
485	Racal	BE6/A-P3	PAPR, HH	3	HRA	Pest
488	AO	R4055A S4055A R5055A S5055A R6055A S6055A R5555A S5555A R6555A S6555A	Rp,FM, ON	2	DM	
489	AO	R7055A S7055A R7755A S7755A	Rp,FM, FP	2	DM	
490	AO	R4091AP S4091AP R5091AP S5091AP R6091AP S6091AP R5591AP S5591AP R6591AP S6591AP	Rp,FM, ON	2	DM	PLE
491	AO	R7091AP S7091AP R7791AP S7791AP	Rp,FM, FF	2	DM	PLE
494	Pulmosan	10405	Rp,FM, FF	1		PLE
495	Pulmosan	10408	Rp,FM, FF	1		

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
497	Pulmosan	10414	Rp, FM, FF	1		SO2/HCl Cl
499	Pulmosan	10420	Rp,FM, FF	1	DM	
501	Pulmosan	10426	Rp, FM, FF	1	DM	SO2/HCl Cl
504	Pirelli	4336.2021	Rp,FM, ON	2		
509	MSA	469727	Rp,FM, ON	1		
510	MSA	470200	Rp,FM, ON	1	DM	PLE
512	MSA	469729	Rp,FM, ON	1	DM	SO2/HCl CH2-O/Cl
521	Scott	64-OA-H 64E-OA-H 64M-OA-H 64ME-OA-H 64S-OA-H 64SE-OA-H	Rp,FM, ON	2	HRA	SO2/HCl CH2-O/Cl
522	Scott	65-OA-H 65S-OA-H 65XL-OA-H	Rp,FM, FF	2	HRA	SO2/HCl CH2-O/Cl
523	Scott	64-OV-H 64E-OV-H 64M-OV-H 64ME-OV-H 64S-OV-H 64SE-OV-H	Rp,FM, ON	2	HRA	PLE/Pest
524	Scott	65-OV-H 65S-OV-H 65XL-OV-H	Rp,FM, FF	2	HRA	PLE/Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
529	Pirelli	4333.2021	Rp,FM, FF	2		
530	Survivair	2141-00 2241-00 2341-00	Rp,FM, ON	2	DFMR	Pest
531	Survivair	3241-00 4241-00	Rp,FM, FF	2	DFMR	Pest
532	Survivair	2143-00 2243-00 2343-00	Rp,FM, ON	2	DFMR	SO2/HCl CH2-O/Cl
533	Survivair	3243-00 4243-00	Rp,Fm,FF	2	DFMR	SO2,Cl HCl/CH2-O
535	Racal	BE3/AC BE7/AC	PAPR, FF	3		
538	Safety Supply	F-160-OV F-200-OV F-800-OV	Rp,FM, ON	2		
539	Safety Supply	F-700-OV	Rp,FM, FF	2		
540	Safety Supply	F-160-OV-F-SP F-200-OV-F-SP F-800-OV-F-SP	Rp,FM, ON	2		PLE
541	Safety Supply	F-700-OV-F-SP	Rp,FM, FF	2		PLE
542	Safety Supply	F-200-OA F-160-OA F-800-OA	Rp,FM, ON	2		SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
543	Safety Supply	F-700-OA	Rp,FM, FF	2		SO2/HCl Cl
548	Safety Supply	F-160-OV-F-P F-200-OV-F-P F-800-OV-F-P	Rp,FM, ON	2	DM	
549	Safety Supply	F-700-OV-F-P	Rp,FM, FF	2	DM	
552	Safety Supply	F-160-OA-F-P F-200-OA-F-P F-800-OA-F-P	Rp,FM, ON	2	DM	HCl/SO2 Cl
553	Safety Supply	F-700-OA-F-P	Rp,FM, FF	2	DM	SO2/HCl Cl
554	Pulmosan	10438 10441 11060	Rp,FM, ON	2	DM	PLE
555	Willson	1521 1521R 1521SS	Rp,FM, ON	2		
556	Willson	3521 3521R 3521SS	Rp,FM, ON	2		
557	Willson	1531 1531R 1531SS	Rp,FM, ON	2		
558	Willson	3531 3531R 3531SS	Rp,FM, ON	2		

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
563	Willson	1525 1525R 1525SS	Rp,FM, ON	2		SO2/HCl Cl
564	Willson	3525 3525R 3525SS	Rp,FM, ON	2		SO2/HCl Cl
565	Willson	1535 1535R 1535SS	Rp,FM, ON	2		SO2/HCl Cl
566	Willson	3535 3535R 3535SS	Rp,FM, ON	2		SO2/HCl Cl
567	Willson	152110 152110R 152110SS	Rp,FM, ON	2	DM	
568	Willson	352110 3521100R 352110SS	Rp,FM, ON	2	DM	
569	Willson	152113 152113R 153113SS	Rp,FM, ON	2	DFM	
570	Willson	352113 352113R 352113SS	Rp,FM, ON	2	DFM	
571	Willson	152115 152115R 152115SS	Rp,FM, ON	2	DM	PLE/Pest
572	Willson	352115 352115R 352115SS	Rp,FM, ON	2	DM	PLE/Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
573	Willson	152116 152116R 152116SS	Rp,FM, ON	2	DM	PLE
574	Willson	352116 352116R 352116SS	Rp,FM, ON	2	DM	PLE
577	Willson	152510 152510R 152510SS	Rp,FM, ON	2	DM	SO2/HCl Cl
578	Willson	352510 352510R 352510SS	Rp,FM, ON	2	DM	SO2/HCl Cl
579	Willson	153112 153112R 153112SS	Rp,FM, ON	2	HA	
580	Willson	353112 353112R 353112SS	Rp,FM, ON	2	HA	
583	Willson	153512 153512R 153512SS	Rp,FM, ON	2	HA	SO2/HCl Cl
584	Willson	353512 353512R 353512SS	Rp,FM, ON	2	HA	SO2/HCl Cl
585	AO	R4058A S4058A R5058A S5058A R6058A S6058A R5558A S5558A R6558A S6558A	Rp,FM, ON	2	DFM	Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
586	AO	R7058A S7058A R7758A S7758A	Rp,FM, ON	2	DFM	Pest
587	AO	R4563A S4563A R5563A S5563A R6563A S6563A R55563A S55563A R65563A S65563A	Rp,FM, ON	2	DFM	SO2/HCl ClO2/Pest Cl
588	AO	R7563A S7563A R77563A S77563A	Rp,FM, FF	2	DFM	SO2/HCl ClO2/Pest Cl
602	Racal	BE17/AP3	PAPR, HH	3	HRA	Pest
605	Racal	BE1/AE	PAPR, HH	3		SO2/HCl Cl
606	Racal	BE3/AE BE7/AE	PAPR, FF	3		SO2/HCl Cl
607	Racal	BE5/AE	PAPR, HH	3		SO2/HCl Cl
608	Racal	BE6/AE	PAPR, HH	3		SO2/HCl Cl
609	Racal	BE8/A	PAPR, ON	3		
611	Racal	BE8/AP3	PAPR, ON	3	HRA	Pest

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
615	Racal	BE8/AE	PAPR, ON	3		SO2/HCl Cl
616	Shoplyne	11060 10441	Rp,FM, ON	2	DM	PLE
617	Glendale	GR-1621-50 GR-2021-50 GR-8021-50	Rp,FM, ON	2	HRA	
618	Glendale	GR-7021-50	Rp,FM, FF	2	HRA	
621	Glendale	GR-2023-50 GR-8023-50 GR-1623-50 GR-4023-50	Rp,FM, ON	2	HRA	SO2/HCl Cl
622	Glendale	GR-7023-50	Rp, Fm, FF	2	HRA	SO2/HCl Cl
625	Neoterik	NP1562-5	PAPR, ON	3		
626	Neoterik	NP1562-7	PAPR, ON	3		SO2/HCl Cl
630	Racal	BE4/A	PAPR, HH	3		
632	Racal	BE4/AP3	PAPR, HH	3	HRA	Pest
636	Racal	BE4/AE	PAPR, HH	3		SO2/HCl Cl
637	Neoterik	NP1664-5 NP1564-5 1964-5	PAPR, FF	3		

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
638	Neoterik	NP1664-7 NP1564-7 1964-7	PAPR, FF	3		SO2/HCl Cl
647	Racal	BE3/AEP3 BE7/AEP3	PAPR, FF	2	HRA	SO2/HCl Cl
648	Racal	BE8/AEP3	PAPR, ON	3	HRA	SO2/HCl Cl
649	North	7591S/M/L 7791S/M/L	Rp,Fm, ON	2	DFM	
650	North	75BP91M 75BP91L	Rp, Bm, ON	2	DFM	
651	North	7691 7691S	Rp, Fm, FF	2	DFM	
655	North	7593S/M/L 7793S/M/L	Rp,Fm, ON	2	DFM	SO2/HCl Cl/CH2-O
656	North	75BP93M 75BP93L	Rp,Bm, ON	2	DFM	SO2/HCl Cl/CH2-O
657	North	7693 7693S	Rp,Fm, FF	2	DFM	SO2/HCl Cl/CH2-O
661	Protech	1694-G100	Rp,Fm, FF	2		
662	Protech	1694-G100-F100	Rp,Fm, FF	2	DM	
663	Protech	1694-G100-F108	Rp,Fm, FF	2	DFM	

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
664	Protech	1694-G104	Rp,Fm, FF	2		SO2/HCl Cl
665	Protech	1694-G104-F100	Rp,Fm, FF	2	DMZ	SO2/HCl Cl
668	Protech	1694-G100-F102	Rp,Fm, FF	2		PLE
669	Protech	1694-G100-F104	Rp,Fm, FF	2	DM	Pest
670	Protech	1694-G104-G208	Rp,Fm, FF	2	HRA	SO2/HCl Cl
672	Protech	1694-G100-G208	Rp,Fm, FF	2		
675	Binks	40-411 40-412 40-413 40-414 40-415 40-416	Rp,Fm, ON	2	HA	PLE
676	AO	R8151A S8151A R8151A* S8151A*	Rp, Fm, ON	1	HRA	
677	AO	R8151AP* S8151AP*	Rp, Fm, ON	1	DM	PLE
678	Eastern	287	Rp, Fm, ON	2	HRA	SO2/HCl Cl

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
679	AO	R7070A S7070A R7770A S7770A	Rp, Fm, FF	2		SO2/HCl ClO2/Cl
683	3M	7801 7801C 7801-L 7801-H	Rp, Fm, FF (For 7801C Combination Type C, CF) Air pressure (psig) 15 - 40 17 - 45 22 - 55 25 - 70	2 Hose length (feet) 25 - 50 75 - 100 125 - 200 225 - 300		
			Hose Length (ft)	Pressure Range (psig) 7801-H	Pressure Range (psig) 7801-L	
			25	7.5 - 15.0	5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	
685	3M	7803 7803C 7803-L 7803-H	Rp, Fm, FF (For 7803C Combination Type C, CF) Air pressure (psig) 15 - 40 17 - 45 22 - 55 25 - 70	2 Hose length (feet) 25 - 50 75 - 100 125 - 200 225 - 300		Cl/HCl OV
			Hose Length (ft)	Pressure Range (psig) 7803-H	Pressure Range (psig) 7803-L	
			25	7.5 - 15.0	5.0 - 15.0	
			50	8.0 - 15.0	5.0 - 15.0	
			100	10.0 - 15.0	6.0 - 15.0	

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
688	3M	7807 7807C 7808-L 7808-H	Rp, Fm, FF	2	DM	

(For 7807C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7808-H	7808-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

690	3M	7809 7809C 7809-L 7809-H	Rp, Fm, FF	2	DM	SO2/Cl HCl

(For 7809C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7809-H	7809-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

691	3M	7810 7810C 7810-L 7810-H	Rp, Fm, FF	2	DM	PLE

(For 7810C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7810-H	7810-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
693	3M	7812 7812C 7812-H 7812-L	Rp, Fm, FF	2	HRA	
			(For 7812C Combination Type C, CF) Air pressure (psig): 15 - 40; 17 - 45; 22 - 55; 25 - 70 Hose length (feet): 25 - 50; 75 - 100; 125 - 200; 225 - 300			
			Hose Length (ft) / Pressure Range (psig) 7812-H / 7812-L 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0			
695	3M	7814 7814C 7814-L 7814-H	Rp, Fm, FF	2	HRA	SO2/HCl Cl
			(For 7814C Combination Type C, CF) Air pressure (psig): 15 - 40; 17 - 45; 22 - 55; 25 - 70 Hose length (feet): 25 - 50; 75 - 100; 125 - 200; 225 - 300			
			Hose Length (ft) / Pressure Range (psig) 7814-H / 7814-L 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0			
717	Willson	122517/R/S/SR/SS/SSS S122517/R/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	HCl/SO2 Cl
718	Willson	162517 172517	FF, Rp, Fm	2	DFM	HCl/SO2 Cl
719	Willson	152517 152517R 152517SS	ON, Rp, Fm	2	DFM	HCl/SO2 Cl

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
720	Willson	302517/R/S/SR/SS/SSS S302517/R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	HCl/SO2 Cl
721	Willson	312517 322517	FF, Rp, Bm	2	DFM	HCl/SO2 Cl
722	Willson	352517 352517R 352517SS	ON, Rp, Bm	2	DFM	HCl/SO2 Cl
729	Willson	122117/R/S/SR/SS/SSS S122117/R/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	Pest/PLE
730	Willson	162117 172117	FF, Rp, Fm	2	DFM	Pest/PLE
731	Willson	152117 152117R 152117SS	ON, Rp, Fm	2	DFM	Pest/PLE
732	Willson	302117S/R/S/SR/SS/SSS S302117/R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	Pest/PLE
733	Willson	312117 322117	FF, Rp, Bm	2	DFM	Pest/PLE
734	Willson	352117 352117R 352117SS	ON, Rp, Bm	2	DFM	Pest/PLE

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
736	Willson	6105S 6105M 6105L	ON,Rp,Fm	2		SO2/Cl/HCl
737	Willson	6101S 6101M 6101L	ON,Rp,Fm	2		
738	Willson	6201S 6201M 6201L	ON,Rp,Fm	1		
740	Willson	6205S 6205M 6205L	ON,Rp,Fm	1		SO2/Cl/HCl
743	Willson	6401 S6401 6501 S6501	FF,Rp,Fm	2		
745	Willson	6505 S6505 6405 S6405	FF,Rp,Fm	2		SO2/Cl/HCl
747	Willson	6411 S6411 6511 S6511	FF,Rp,Fm	2	DM	PLE/Pest
748	Willson	6515 S6515 6415 S6415	FF,Rp,Fm	2	DM	SO2/Cl/HCl

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
751	Willson	6111S 6111M 6111L	ON,Rp,Fm	2	DM	PLE/Pest
753	Willson	6115S 6115M 6115L	ON,Rp,Fm	2	DM	SO2/Cl/HCl
755	Willson	6211S 6211M 6211L	ON,Rp,Fm	1	DM	PLE
756	Willson	6215S 6215M 6215L	ON,Rp,Fm	1	DM	SO2/Cl/HCl
759	Willson	6141S 6141M 6141L	Rp,Fm,ON	2	HA	
760	Willson	6541 S6541 6441 S6441	Rp,Fm,FF	2	HA	
763	Willson	6145S 6145M 6145L	Rp,Fm,ON	2	HA	SO2/Cl/HCl
764	Willson	6445 S6445 6545 S6545	Rp,Fm,FF	2	HA	SO2/Cl/HCl
776	Scott	66STC-OA S66STC-OA 66MTC-OA S66MTC-OA 66LTC-OA S66LTC-OA	Fm,Rp,ON	2		HCl/Cl/SO2 CH2-O

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
777	Scott	66STC-OA-D S66STC-OA-D 66MTC-OA-D S66MTC-OA-D 66LTC-OA-D S66LTC-OA-D	Fm,Rp,ON	2	DM	HCl/Cl/SO2 CH2-O
778	Scott	66STC-OA-F S66STC-OA-F 66MTC-OA-F S66MTC-OA-F 66LTC-OA-F S66LTC-OA-F	Fm,Rp,ON	2	DFMR	HCl/Cl/SO2 CH2-O
779	Scott	66STC-OA-H S66STC-OA-H 66MTC-OA-H S66MTC-OA-H 66LTC-OA-H S66LTC-OA-H	Fm,Rp,ON	2	HRA	HCl/Cl/SO2 CH2-O
780	Scott	66STC-OV S66STC-OV 66MTC-OV S66MTC-OV 66LTC-OV S66LTC-OV	Rp,Fm,ON	2		
781	Scott	66STC-OV-D S66STC-OV-D 66MTC-OV-D S66MTC-OV-D 66LTC-OV-D S66LTC-OV-D	Rp,Fm,ON	2	D,M	
782	Scott	66STC-OVP S66STC-OVP 66MTC-OVP S66MTC-OVP 66LTC-OVP S66LTC-OVP	Rp,Fm,ON	2	D,F,R,M	PLE/Pest

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
783	Scott	66STC-OV-H S66STC-OV-H 66MTC-OV-H S66MTC-OV-H 66LTC-OV-H S66LTC-OV-H	Rp,Fm,ON	2	H,R,A	PLE/Pest
787	Willson	6125S 6125M 6125L	Rp,Fm,ON	2	DFMR	SO2/Cl/HCl
788	Willson	6425 S6425 6525 S6525	Rp,Fm,FF	2	DFMR	SO2/Cl/HCl
791	Willson	6121S 6121M 6121L	Rp,Fm,ON	2	PLE	Pest
792	Willson	6421 S6421 6521 S6521	Rp,Fm,FF	2	PLE	Pest
793	AO	S7551HE S7551HEC	FF,Rp,Fm	2 For S7551HEC Comb. Type CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	HRA	PLE/Pest
794	AO	S7553HE S7553HEC	FF,Rp,Fm	2 For S7553HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	HRA Pest	SO2/HCl/Cl CLO2

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
796	AO	S7591AP S7591APC	FF,Rp,Fm	2 For S7591APC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	DM	PLE
797	AO	S7551A S7551AC	FF,Rp,Fm	2 For S7551AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		
799	AO	S7553A S7553AC	FF,Rp,Fm	2 For S7553AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		Cl/SO2/HCl CLO2
801	AO	S7555A S7555AC	FF,Rp,Fm	2 For S7555AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	D,M	
802	AO	S7558A S7558AC	FF,Rp,Fm	2 For S7558AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	D,F,M	Pest
805	AO	S7570A S7570AC	FF,Rp,Fm	2 For S7570AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		OV/SO2/HCl CLO2

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
806	AO	S7551AD S7551ADC	FF,Rp,Fm	2 For S7551ADC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	D,M,	
807	AO	S7551AP S7551APC	FF,Rp,Fm	2 For S7551APC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	D,M,	PLE
809	AO	S7553AD S7553ADC	FF,Rp,Fm	2 For S7553ADC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	D,M,	Cl/SO2/HCl CLO2
812	AO	S75563A S75563AC	FF,Rp,Fm	2 For S75563AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	D,F,M	Cl/SO2/HCl CLO2
813	Glendale	GR9521	Rp,Fm,ON	2		
814	Glendale	GR9521-10	Rp,Fm,ON	2	DM	
815	Glendale	GR9521-50	Rp,Fm,ON	2	HRA	
816	Glendale	GR9521-60	Rp,Fm,ON	2		PLE
820	Glendale	GR9523	Rp,Fm,ON	2		SO2/Cl/HCl
821	Glendale	GR9523-10	Rp,Fm,ON	2	DM	SO2/Cl/HCl

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
822	Glendale	GR9523-50	Rp,Fm,ON	2	HRA	SO2/Cl/HCl
826	Willson	6221S 6221M 6221L	Rp,Fm,ON	1	DFM	Pest/PLE
828	Willson	6225S 6225M 6225L	Rp,Fm,ON	1	DFM	SO2/Cl/HCl
830	MSA	484449 484450 484451 484461 484462 484463	Rp,Fm,FF	2 Comb. Hose Length feet: 8 - 300	DM Type C, Pd Press. Range psig: 65 - 85	PLE
831	MSA	484474	Rp,Fm,FF	2 Comb. Hose Length feet: 8 - 300	DM Type C, Pd Press. Range psig: 65 - 85	
833	MSA	484476	Rp,Fm,FF	2 Comb. Hose Length feet: 8 - 300	DM Type C, Pd Press. Range psig: 65 - 85	SO2/Cl/HCl CH2-O
835	MSA	484478	Rp,Fm,FF	2 Comb. Hose Length feet: 8 - 300	DM Type C, Pd Press. Range psig: 65 - 85	
838	MSA	484479	Rp,Fm,FF	2 Comb. Hose Length feet: 8 - 300	HA Type C, Pd Press. Range psig: 65 - 85	Pest/PLE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
841	MSA	484484	Rp,Fm,FF	2 Comb. Hose Length feet 8 - 300	HA Type C, Pd Press. Range psig 65 - 85	Pest/PLE
842	MSA	484487	Rp,Fm,FF	2 Comb. Hose Length feet 8 - 300	HA Type C, Pd Press. Range psig 65 - 85	
844	MSA	483993	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	DM Type C, CF Press. Range psig 35 - 40	SO2/Cl/HCl CH2-O
846	MSA	484015 484016 484017 484027 484028 484029	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	DM Type C, CF Press. Range psig 35 - 40	PLE
847	MSA	484001	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	DM Type C, CF Press. Range psig 35 - 40	Pest/PLE
848	MSA	484004	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	HA Type C, CF Press. Range psig 35 - 40	
849	MSA	483995	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	DM Type C, CF Press. Range psig 35 - 40	

CHEMICAL CARTRIDGES - ORGANIC VAPOR

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
850	MSA	483996	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	HA Type C, CF Press. Range psig 35 - 40	Pest/PLE
852	MSA	484005	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	DM Type C, CF Press. Range psig 35 - 40	SO2/Cl/HCl CH2-O
853	MSA	483999	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	DFMR Type C, CF Press. Range psig 35 - 40	SO2/Cl/HCl CH2-O
854	MSA	483998	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	HRA Type C, CF Press. Range psig 35 - 40	SO2/Cl/HCl CH2-O
855	MSA	483990	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	DM Type C, CF Press. Range psig 35 - 40	

7. Paints, Lacquers and Enamels

Approval

Approved as respiratory protection against (1) mists of paints, lacquers and enamels; (2) not more than 1000 parts per millions organic vapors by volume.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges and filters or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

Do not wear for protection against organic vapors with poor warning properties or those that generate high heats of reaction.

Maximum use concentrations will be lower than 1000 parts per million organic vapors where that concentration produces atmospheres immediately dangerous to life or health.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
54	Willson	122115 S122115SS 122115S 122115SS 122115SR S122115 122115R S122115R S122115SR 122115SSS S122115SSS S122115S	Rp,Fm,ON	2	DM	OV/Pest
75	North	7531* 7531M 7731M 7531S 7731S 7531L 7731L	Rp,Fm,ON	2		OV
75	Acme	27*	Rp,Fm,ON	2		OV
79	MSA	448848 461009	Rp,Fm,Bm,ON	2	DMZ	OV/Pest
80	MSA	448849 460853 462241 466249 466250 466251 466255 466528 466529 468015 thru 468018 476726 thru 476728 479704 thru 479712 479914 thru 479922	Rp,Fm,Bm,ON	2	DM	OV

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
87	Binks	40-128 40-141 40-196 40-197 40-198	Rp,Fm,ON	2	DM	OV 40-143
90	Glendale	GR1621-20* GR1621-60 GR2021-20* GR2021-60 GR4021-20* GR4021-60 GR8021-20* GR8021-60	Rp,Fm,ON	2		OV
92	AO	R8191P* S8191P*	Rp,Fm,ON	1	DM	OV
93	AO	R8151P S8151P	Rp,Fm,ON	1	DM	OV
94	AO	R4051P* R5051P* R6051P*	Rp,Fm,ON	2	DM	OV
96	DeVilbiss	MSP-505* MSP-505-1*	Rp,Fm,ON	2	DM	OV
97	AO	R4091P S4091P R5091P S5091P R6091P S6091P	Rp,Fm,ON	2	DM	OV
100	Pulmosan	C-251* 10006 10180 10225 10267 11030	Rp,Fm,ON	1		OV
100	Fibre Metal	C-251* 10180*	Rp,Fm,ON	1		OV

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
100	Shoplyne	10006 10267 10180 10225	Rp,FM,ON	1		OV
117	Scott	6412-0313* 6422-0313* 6411-0313* 6413-0313* 6421-0313* 6423-0313* 64-OVP 64E-OVP 64M-OVP 64ME-OVP 64S-OVP 64SE-OVP	Rp,Fm,ON	2	DFMR	OV/Pest
123	3M	8712 8734 8741 8751	Su,ON	1	DM	OV/Pest
124	Protech	1482-G100-F102 1482-S-G100-F102 1482-L-G100-F102 1585S-G100-F102 1585-G100-F102 1585L-G100-F102	Rp,Fm,ON	2		OV
124	Eastern	E454	Rp,Fm,ON	2		OV
124	Sellstrom	315-G100-F102	Rp,Fm,ON	2		OV
124	Safe-Tex	236-G100-F102*	Rp,Fm,ON	2		OV
125	US Safety	150T24	Rp,Fm,ON	2		OV
126	Cesco	95RC35	Rp,Fm,ON	2		OV

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
127	Stewart-Warner	7931*	Rp,Fm,ON	2		OV
128	Northcott	70-450*	Rp,Fm,ON	2		OV
133	Willson	162115 172115	Rp,Fm,FF	2	DM	OV/Pest
149	MSA	461846 466256 466257 471726 471727 480386 480387 480388 483496	Rp,Fm,FF	2	DM	OV
155	MSA	461853 483485	Rp,Fm,FF	2	HA	OV/Pest
161	MSA	460846 461012	Rp,Fm,Bm,ON	2	HA	OV/Pest
175	North	75BP31* 75BP31M 75BP31L	Rp,Bm,ON	2		OV
188	North	7631 7631S 7631N* 7631SN*	Rp,Fm,FF	2		OV
201	MSA	465986 466239 466240 466241 466526 466527	Rp,Fm,ON	2	DM	OV

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
204	North	7581M 7781M 7581S 7781S 7581L 7781L 7581*	Rp,Fm,ON	2	HRA	OV
205	North	75BP81* 75BP81M 75BP81L	Rp,Bm,ON	2	HRA	OV
206	North	7681 7681S	Rp, Fm,FF	2	HRA	OV
224	Scott	6470-0313* 6480-0313* 65-OV-P 65S-OV-P 65XL-OVP	Rp, Fm,FF	2	DFMR	OV/Pest
239	AO	R7051P*	Rp,Fm,FF	2		OV
240	AO	R7091P S7091P	Rp,Fm,FF	2	DM	OV
258	Willson	122116 S122116 122116S S122116R 122116SR S122116S S122116SS S122116SSS 122116SSS S122116SR 122116R 122116SS	Rp,Fm,ON	2	DM	OV
259	Willson	162116 172116	Rp,Fm,FF	2	DM	OV

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
271	Cesco	96RC35*	Rp,Fm,FF	2		OV
272	US Safety	151T24*	Rp,Fm,FF	2		OV
278	DeVilbiss	MSP-506	Rp,Fm,ON	1	DM	OV
285	MSA	468023 468024 468025 471728 471729	Rp, FM,FF	2	DM	OV
286	MSA	468026 468027 468028 468029 468030 468031	Rp, BM,ON	2	DM	OV
321	Survivair	2221-00 2121-00 2321-00	Rp, FM,ON	2	DM	OV
333	AO	R4051AP S4051AP R5051AP S5051AP R6051AP S6051AP R5551AP S5551AP R6551AP S6551AP	Rp, FM,ON	2	DM	OV
334	AO	R7051AP S7051AP R7751AP S7751AP	Rp, FM,FF	2	DM	OV
335	DeVilbiss	MSP-508 MSP-9508	Rp, FM,ON	2	DM	OV

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
336	US Safety	150T35 150L35	Rp,Fm,ON	2	DFMR	OV/Pest
337	Cesco	95RC115 95SMRC115	Rp,Fm,ON	2	DFMR	OV/Pest
338	US Safety	151T35	Rp,Fm,FF	2	DFMR	OV/Pest
348	Cesco	96RC115	Rp,Fm,FF	2	DFM	OV/Pest
354	North	10041S 10041M	Su,ON	1	DM	OV/Pest
373	Stewart Warner	7931+	Rp, Fm,ON	2	DFMR	OV/Pest
374	Willson	302115 302115R 302115S 302115SR 302115SS 302115SSS S302115 S302115R S302115S S302115SR S302115SS S302115SSS	Rp, Bm,ON	2	DM	OV/Pest
375	Willson	312115 322115	Rp, Bm,FF	2	DM	OV/Pest

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
376	Willson	302116 302116R 302116S 302116SR 302116SS 302116SSS S302116 S302116R S302116S S302116SR S302116SS S302116SSS	Rp, Bm,ON	2	DM	OV
377	Willson	312116 322116	Rp, Bm,FF	2	DM	OV
392	Northcott	70-450+	Rp,Fm,ON	2	DFMR	OV/Pest
406	Glendale	GR7021-20 GR7021-60	Rp,Fm,FF	2		OV
413	AO	R4051HE S4051HE R5051HE S5051HE R6051HE S6051HE R5551HE S5551HE R6551HE S6551HE	Rp,Fm,ON	2	HRA	OV/Pest
414	AO	R7051HE S7051HE	Rp,Fm,FF	2	HRA	OV/Pest
426	AO	R4051EP R5051EP R6051EP	Rp,Fm,ON	2	DMZ	OV
427	AO	R7051EP	Rp,Fm,FF	2	DMZ	OV
428	DeVilbiss	MSL-500	Rp,Fm,ON	2	DMZ	OV

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Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
436	3M	7210	Rp,Fm,ON	2	DM	OV
455	Survivair	3221-00 4221-00	Rp,Fm,FF	2	DM	OV
465	MSA	472755	Rp,Bm,ON	2	HA	OV/Pest
473	MSA	472736 472737 472738 479926 thru 479931	Rp,Bm,ON	2	DM	OV
474	MSA	472739 472740 472741 480055 thru 480063	Rp,Bm,ON	2	DM	OV
490	AO	R4091AP S4091AP R5091AP S5091AP R6091AP S6091AP R5591AP S5591AP R6591AP S6591AP	Rp,FM,ON	2	DM	OV
491	AO	R7091AP S7091AP R7791AP S7791AP	Rp,FM,FF	2	DM	OV
494	Pulmosan	10405	Rp,FM,FF	1		OV
510	MSA	470200	Rp,FM,ON	1	DM	OV

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
523	Scott	64-OV-H 64E-OV-H 64M-OV-H 64ME-OV-H 64S-OV-H 64SE-OV-H	Rp,FM,ON	2	HRA	OV/Pest
524	Scott	65-OV-H 65S-OV-H 65XL-OV-H	Rp,FM,FF	2	HRA	OV/Pest
554	Pulmosan	10438 10441 11060	Rp,Fm,ON	2	DM	OV
571	Willson	152115 152115R 152115SS	Rp,FM,ON	2	DM	OV/Pest
572	Willson	352115 352115R 352115SS	Rp,FM,ON	2	DM	OV/Pest
573	Willson	152116 152116R 152116SS	Rp,FM,ON	2	DM	OV
574	Willson	352116 352116R 352116SS	Rp,FM,ON	2	DM	OV
616	Shoplyne	11060 10441	Rp,FM,ON	2	DM	OV
668	Protech	1694-G100-F102	Rp,Fm,FF	2		OV

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
675	Binks	40-411 40-412 40-413 40-414 40-415 40-416	Rp,Fm,ON	2	HA	OV
677	AO	R8151AP* S8151AP*	Rp, Fm,ON	1	DM	OV
691	3M	7810 7810C 7810-H 7810-L	Rp, Fm,FF (For 7810C Combination Type C, CF) Air pressure (psig): 15 - 40; 17 - 45; 22 - 55; 25 - 70 Hose length (feet): 25 - 50; 75 - 100; 125 - 200; 225 - 300 Hose Length (ft) / Pressure Range (psig) 7810-H / 7810-L: 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0	2	DM	OV
729	Willson	122117R/S/SR/SS/SSS S122117/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	Pest/OV
730	Willson	162117 172117	FF, Rp, Fm	2	DFM	Pest/OV
731	Willson	152117 152117R 152117SS	ON, Rp, Fm	2	DFM	Pest/OV
732	Willson	302117R/S/SR/SS/SSS S302117R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	Pest/OV

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
733	Willson	312117 322117	FF, Rp, Bm	2	DFM	Pest/OV
734	Willson	352117 352117R 352117SS	ON, Rp, Bm	2	DFM	Pest/OV
747	Willson	6411 S6411 6511 S6511	FF,Rp,Fm	2	DM	OV/Pest
751	Willson	6111S 6111M 6111L	ON,Rp,Fm	2	DM	OV/Pest
755	Willson	6211S 6211M 6211L	ON,Rp,Fm	1	DM	OV/Pest
782	Scott	66STC-OVP S66STC-OVP 66MTC-OVP S66MTC-OVP 66LTC-OVP S66LTC-OVP	Rp,Fm,ON	2	DFRM	OV/Pest
783	Scott	66STC-OV-H S66STC-OV-H 66MTC-OV-H S66MTC-OV-H 66LTC-OV-H S66LTC-OV-H	Rp,Fm,ON	2	HRA	OV/Pest
791	Willson	6121S 6121M 6121L	Rp,Fm,ON	2	DFMR	Pest/OV

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
792	Willson	6421 S6421 6521 S6521	Rp,Fm,FF	2	DFMR	Pest/OV
796	AO	S7591AP S7591APC	FF,Rp,Fm	2 For S7591APC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	DM	OV
807	AO	S7551AP S7551APC	FF,Rp,Fm	2 For S7551APC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	DM	OV
816	Glendale	GR9521-60	Rp,Fm,ON	2		OV
826	Willson	6221S 6221M 6221L	Rp,Fm,ON	1	DFM	Pest/OV
830	MSA	484449 484450 484451 484461 484462 484463	Rp,Fm,FF	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	DM	OV
838	MSA	484479	Rp,Fm,FF	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	HA	OV

CHEMICAL CARTRIDGES - PAINTS, LACQUERS, ENAMELS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
841	MSA	484484	Rp,Fm,FF	2 Comb. Hose Length feet 8 - 300	HA Type C, Pd Press. Range psig 65 - 85	Pest/OV
846	MSA	484015 484016 484017 484027 484028 484029	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	DM Type C, CF Press. Range psig 35 - 40	OV
847	MSA	484001	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	DM Type C, CF Press. Range psig 35 - 40	Pest/OV
850	MSA	483996	Rp,Fm,FF	2 Comb. Hose Length (feet) 8-300	HA Type C, CF Press. Range psig 35 - 40	Pest/OV

8. Pesticides

Approval

Approved as respiratory protection against pesticides.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

Do not wear for protection against organic vapors with poor warning properties or those that generate high heats of reaction.

Maximum use concentrations will be lower than 1000 parts per million organic vapors where that concentration produces atmospheres immediately dangerous to life or health.

Not approved for fumigants.

Refer to pesticide label for limitations on respirator use.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

E. Chemical Cartridges
8. Pesticides

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
54	Willson	122115 S122115SS 122115S 122115SS 122115SR S122115 122115R S122115R S122115SR 122115SSS S122115SSS S122115S	Rp,Fm, ON	2	DM	OV/PLE
74	North	7549* 7549M 7749M 7549S 7749S 7549L 7749L	Rp,Fm, ON	2		OV
78	3M	W-262-12 W-262-24* W-263-12-L/M/S* W-264-12 W-279-12 W-279-24* W-291-12 W-291-24* W-296-12 W-296-24* W-351-12 W-351-24*	PAPR, HH	1		
79	MSA	461009 448848	Rp,Fm,Bm ON	2	DM	PLE/OV

CHEMICAL CARTRIDGES - PESTICIDES

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
106	AO	R4058 S4058 R5058 S5058 R6058 S6058	Rp,Fm, ON	2	DFM	OV
110	Pulmosan	C-241* 10264 10177 10228 10003 11051	Rp,Fm, ON	1		
110	Fibre Metal	C-241* 10177* 10228* 10003* 10264*	Rp,Fm, ON	1		
110	Shoplyne	10003 10177 10228 10264	Rp,FM, ON	1		
117	Scott	6412-0313* 6422-0313* 6411-0313* 6413-0313* 6421-0313* 6423-0313* 64-OVP 64E-OVP 64M-OVP 64ME-OVP 64S-OVP 64SE-OVP	Rp,Fm, ON	2	DFMR	OV/PLE
123	3M	8712 8734 8741 8751	Su, ON	1	DM 8734, 8712, 8741 only	OV/PLE

CHEMICAL CARTRIDGES - PESTICIDES

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
133	Willson	162115 172115	Rp,Fm, FF	2	DM	OV/PLE
148	MSA	461858 483490	Rp,Fm, FF	2		
161	MSA	460846 461012	Rp,Fm,Bm, ON	2	HA	OV/PLE
178	North	75BP49* 75BP49M 75BP49L	Rp,Bm, ON	2		OV
190	North	7649 7649S 7649N* 7649SN*	Rp,Fm, FF	2		OV
197	Glendale	GR-1625 GR-2025 GR-4025 GR-8025	Rp,Fm, ON	2		
198	US Safety	150T30*	Fm, ON	2		OV
199	Cesco	95RC125*	Fm, ON	2		OV
202	Protech	1482-G100-F104 1482-S-G100-F104 1482-L-G100-F104 1585S-G100-F104 1585-G100-F104 1585L-G100-F104	Rp,Fm, ON	2	DM	OV
202	Eastern	E455	Rp,Fm, ON	2	DM	OV
202	Sellstrom	315-G100-F104	Rp,Fm, ON	2	DM	OV

CHEMICAL CARTRIDGES - PESTICIDES

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
224	Scott	6470-0313* 6480-0313* 65-OVP 65S-OVP 65XL-OVP	Rp, Fm, FF	2	DFMZR	OV/PLE
238	AO	R7058 S7058	Rp,Fm, FF	2	DMF	OV
273	Cesco	96RC125*	Rp,Fm, FF	2		
274	US Safety	151T30*	Rp,Fm, FF	2		
281	AO	R4563 S4563 R5563 S5563 R6563 S6563	Rp,Fm, ON	2	DFM	SO2/HCl/OV Cl/CLO2
282	AO	R7563 S7563	Rp,Fm, FF	2	DFM	SO2/HCl/Cl OV/CLO2
323	Survivair	2131-00* 2231-00* 2331-00*	Rp, FM, ON	2	DFMR	OV
336	US Safety	150T35 150L35	Rp,Fm, ON	2	DFMR	OV/PLE
337	Cesco	95RC115 95SMRC115	Rp,Fm, ON	2	DFMR	OV/PLE
338	US Safety	151T35	Rp,Fm, FF	2	DFMR	OV/PLE
348	Cesco	96RC115	Rp,Fm, FF	2	DFM	OV/PLE

CHEMICAL CARTRIDGES - PESTICIDES

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
354	North	10041S 10041M	Su, ON	1	DM	OV/PLE
373	Stewart Warner	7931+	Rp, Fm, ON	2	DFMR	OV/PLE
374	Willson	302115 302115R 302115S 302115SR 302115SS 302115SSS S302115 S302115R S302115S S302115SR S302115SS S302115SSS	Rp, Bm, ON	2	DM	OV/PLE
375	Willson	312115 322115	Rp, Bm, FF	2	DM	OV/PLE
392	Northcott	70-450+	Rp,Fm, ON	2	DFMR	OV/PLE
409	Glendale	GR7025	Rp,Fm, FF	2		
413	AO	R4051HE S4051HE R5051HE S5051HE R6051HE S6051HE R5551HE S5551HE R6551HE S6551HE	Rp,Fm,ON	2	HRA	PLE/OV
414	AO	R/S7051HE R/S7751HE	Rp,Fm,FF	2	HRA	PLE/OV

CHEMICAL CARTRIDGES - PESTICIDES

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
417	AO	R/S4053HE R/S5053HE R/S6053HE R/S5553HE R6553HE S6553HE	Rp, Fm, ON	2	HRA	OV/CLO2/ Cl/HCl SO2
418	AO	R/S7053HE R/S7753HE	Rp, Fm, FF	2	HRA	OV/CLO2/ Cl2/HCl
439	3M	7205	Rp,Fm, ON	2		
456	Survivair	3231-00*	Rp,Fm, FF	2	DFMR	OV
464	MSA	472752	Rp,Bm, ON	2	DM	OV
465	MSA	472755	Rp,Bm, ON	2	HA	OV/PLE
482	Racal	BE 1/A-P3	PAPR, HH	3	HRA	OV
483	Racal	BE 3/A-P3 BE 7/A-P3	PAPR, FF	3	HRA	OV
484	Racal	BE 5/A-P3	PAPR, HH	3	HRA	OV
485	Racal	BE 6/A-P3	PAPR, HH	3	HRA	OV
493	Pulmosan	10402	Rp,FM, FF	1		
523	Scott	64-OV-H 64E-OV-H 64M-OV-H 64ME-OV-H 64S-OV-H 64SE-OV-H	Rp,FM, ON	2	HRA	OV/PLE

CHEMICAL CARTRIDGES - PESTICIDES

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
524	Scott	65-OV-H 65S-OV-H 65XL-OV-H	Rp,FM, FF	2	HRA	OV/PLE
530	Survivair	2141-00 2241-00 2341-00	Rp,FM, ON	2	DFMR	OV
531	Survivair	3241-00 4241-00	Rp,FM, FF	2	DFMR	OV
546	Safety Supply	F-160-PT F-200-PT F-800-PT	Rp,FM, ON	2		
547	Safety Supply	F-700-PT	Rp,FM, FF	2		
571	Willson	152115 152115R 152115SS	Rp,FM, ON	2	DM	OV/PLE
572	Willson	352115 352115R 352115SS	Rp,FM, ON	2	DM	OV/PLE
585	AO	R4058A S4058A R5058A S5058A R6058A S6058A R5558A S5558A R6558A S6558A	Rp,FM, ON	2	DFM	OV
586	AO	R7058A S7058A R7758A S7758A	Rp,FM, ON	2	DFM	OV

CHEMICAL CARTRIDGES - PESTICIDES

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
587	AO	R4563A S4563A R5563A S5563A R6563A S6563A R55563A S55563A R65563A S65563A	Rp,FM, ON	2	DFM	SO2/HCl/Cl OV
588	AO	R7563A S7563A R77563A S77563A	Rp,FM, FF	2	DFM	SO2/HCl/Cl OV
602	Racal	BE17/AP3	PAPR, HH	3	HRA	OV
611	Racal	BE8/AP3	PAPR, ON	3	HRA	OV
632	Racal	BE4/AP3	PAPR, HH	3	HRA	OV
669	Protech	1694-G100-F104	Rp,Fm, FF	2	DM	OV
682	Kasco	K80S-T4	PAPR, HH	3		
687	3M	7805 7805C 7805-L 7805-H	Rp, Fm, FF	2		

(For 7805C Combination Type C, CF)

Air pressure (psig)	Hose length (feet)
15 - 40	25 - 50
17 - 45	75 - 100
22 - 55	125 - 200
25 - 70	225 - 300

Hose Length (ft)	Pressure Range (psig) 7805-H	7805-L
25	7.5 - 15.0	5.0 - 15.0
50	8.0 - 15.0	5.0 - 15.0
100	10.0 - 15.0	6.0 - 15.0

CHEMICAL CARTRIDGES - PESTICIDES

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
729	Willson	122117R/S/SR/SS/SSS S122117/R/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	PLE/OV
730	Willson	162117 172117	FF, Rp, Fm	2	DFM	PLE/OV
731	Willson	152117 152117R 152117SS	ON, Rp, Fm	2	DFM	PLE/OV
732	Willson	302117/R/S/SR/SS/SSS S302117/R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	PLE/OV
733	Willson	312117 322117	FF, Rp, Bm	2	DFM	PLE/OV
734	Willson	352117 352117R 352117SS	ON, Rp, Bm	2	DFM	PLE/OV
747	Willson	6411 S6411 6511 S6511	FF,Rp,Fm	2	DM	OV/PLE
751	Willson	6111S 6111M 6111L	ON,Rp,Fm	2	DM	OV/PLE
767	Kasco	K80S-T5N/BP3-2 K80E-T5N/BP3	PAPR,HH	3		
782	Scott	66STC-OVP S66STC-OVP 66MTC-OVP S66MTC-OVP 66LTC-OVP S66LTC-OVP	Rp,Fm,ON	2	DFMR	OV/PLE

CHEMICAL CARTRIDGES - PESTICIDES

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
783	Scott	66STC-OV-H S66STC-OV-H 66MTC-OV-H S66MTC-OV-H 66LTC-OV-H S66LTC-OV-H	Rp,Fm,ON	2	HRA	OV/PLE
791	Willson	6121S 6121M 6121L	Rp,Fm,ON	2	PLE	OV
792	Willson	6421 S6421 6521 S6521	Rp,Fm,FF	2	PLE	OV
793	AO	S7551HE S7551HEC	FF,Rp,Fm	2 For S7551HEC Comb. Type CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	HRA	PLE/OV
794	AO	S7553HE S7553HEC	FF,Rp,Fm	2 For S7557HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	HRA	SO2/HCl/Cl2 CLO2/OV
802	AO	S7558A S7558AC	FF,Rp,Fm	2 For S7558AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	DFM	Pest

CHEMICAL CARTRIDGES - PESTICIDES

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
812	AO	S75563A S75563AC	FF,Rp,Fm	2 For S7553AC Comb. Type C, CF Hose Length feet 25 - 300	DFM Press. Range psig 14 - 37	Cl/SO2/HCl CLO2
825	Glendale	GR9525	Rp,Fm,ON	2		
826	Willson	6221S 6221M 6221L	Rp,Fm,ON	1	DFM	OV/PLE
838	MSA	484479	Rp,Fm,FF	2 Comb. Type C, Pd Hose Length feet 8 - 300	HA Press. Range psig 65 - 85	OV/PLE
841	MSA	484484	Rp,Fm,FF	2 Comb. Type C, Pd Hose Length feet 8 - 300	HA Press. Range psig 65 - 85	PLE/OV
847	MSA	484001	Rp,Fm,FF	2 Comb. Type C, CF Hose Length (feet) 8-300	DM Press. Range psig 35 - 40	PLE/OV
850	MSA	483996	Rp,Fm,FF	2 Comb. Type C, CF Hose Length (feet) 8-300	HA Press. Range psig 35 - 40	PLE/OV

9. Vinyl Chloride

Approval

Approved as respiratory protection against 10 parts per million vinyl chloride or until indicator change.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

This respirator shall be carefully fitted to the wearer's face before use, in accordance with the manufacturer's facepiece fitting instructions.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

E. Chemical Cartridges
9. Vinyl Chloride

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
200	3M	8716	Su, ON	1		

10. Other Gases and Vapors

Approval

See approval labels for approved maximum use concentration and for specific limitations.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

This respirator shall be carefully fitted to the wearer's face before use, in accordance with the manufacturer's facepiece fitting instructions.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - MERCURY

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
629	MSA	472959	Rp,BM, ON	2		Cl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - HYDROGEN SULFIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
492	Scott	70-AG	ES, MP	1		Cl/HCl
514	MSA	471914 476337 476338	ES, MP	1	DM	SO2/HCl/Cl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - CHLORINE DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
343	AO	R4053A S4053A R5053A S5053A R6053A S6053A R5553A S5553A R6553A S6553A	Rp,Fm,ON	2		OV/SO2/HCl Cl
344	AO	R7053A S7053A R7753A S7753A	Rp,Bm,FF	2		OV/SO2/HCl Cl
345	AO	R4053AD S4053AD R5053AD S5053AD R6053AD S6053AD R5553AD S5553AD R6553AD S6553AD	Rp,Fm,ON	2	DM	OV/SO2/HCl Cl
346	AO	R7053AD S7053AD R7753AD S7753AD	Rp,Fm,FF	2	DM	OV/SO2/HCl Cl
417	AO	R4053HE S4054HE R5053HE S5053HE R6053HE S6053HE R5553HE S5553HE R6553HE S6553HE	Rp,Fm,ON	2	HRA	OV/SO2/HCl Cl

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
418	AO	R7053HE S7053HE R7753HE S7753HE	Rp,Fm,FF	2	HRA	OV/SO2/HCl Cl
587	AO	R4563A S4563A R5563A S5563A R6563A S6563A R55563A S55563A R65563A S65563A	Rp,FM,ON	2	DFM	OV/SO2/HCl Cl/Pest
588	AO	R7563A S7563A R77563A S77563A	Rp,FM,FF	2	DFM	OV/SO2/HCl Cl/Pest
679	AO	R7070A S7070A R7770A S7770A	Rp,Fm,FF	2		OV/SO2/HCl Cl
794	AO	S7553HE S7553HEC	FF,Rp,Fm	2 For S7553HEC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	HRA	SO2/HCl/Cl OV/Pest
799	AO	S7553A S7553AC	FF,Rp,Fm	2 For S7553AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		OV/SO2/HCl Cl/CLO2

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
805	AO	S7570A S7570AC	FF,Rp,Fm	2 For S7570AC Comb. Type C, CF Hose Length feet: 25 - 300	Press. Range psig: 14 - 37	OV/SO2/HCl Cl/CLO2
809	AO	S7553AD S7553ADC	FF,Rp,Fm	2 For S7553ADC Comb. Type C, CF Hose Length feet: 25 - 300	DM Press. Range psig: 14 - 37	OV/SO2/HCl Cl/CLO2
812	AO	S75563A S75563AC	FF,Rp,Fm	2 For S75563AC Comb. Type C, CF Hose Length feet: 25 - 300	DFM Press. Range psig: 14 - 37	OV/HCl/Cl CLO2

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - FORMALDEHYDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
41	MSA	459434 461006	Rp,Fm,Bm,ON	2	DM	SO2/Cl/HCl
47	MSA	459435 461007	Rp,Fm,Bm,ON	2	DM	OV/SO2/HCl Cl
65	North	7503S,M,L 7703S,M,L	Rp,Bm,ON	2		OV/SO2/Cl HCl
66	North	7513S,M,L 7713S,M,L	Rp,Bm,ON	2	DM	OV/SO2/Cl HCl
104	North	75BP03* 75BP03M 75BP03L	Rp,Bm,ON	2		OV/SO2/Cl HCl
105	North	75BP13M 75BP03L	Rp,Bm,ON	2	DM	OV/SO2/Cl HCl
115	Scott	6411-0001* 6412-0001* 6413-0001* 6421-0001* 6422-0001* 6423-0001* 64-AG 64E-AG 64M-AG 64ME-AG 64S-AG 64SE-AG	Rp,Fm,ON	2		SO2/HCl/Cl
116	Scott	6411-0101* 6413-0101* 6421-0101* 6423-0101* 6412-0101* 6422-0101*	Rp,Fm,ON	2	DM	SO2/HCl/Cl

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
116 Cont.		64-AG-D 64E-AG-D 64M-AG-D 64ME-AG-D 64S-AG-D 64SE-AG-D				
145	MSA	461849 483481	Rp,Fm,FF	2	DM	SO2/HCl/Cl
146	MSA	461850 483482	Rp,Fm,FF	2	DM	OV/SO2/HCl /Cl
150	MSA	461854 483486	Rp,Fm,FF	2	HA	SO2/HCl/Cl
153	MSA	461855 483487	Rp,Fm,FF	2	HA	OV/SO2/HCl Cl
154	MSA	461856 484888	Rp,Fm,FF	2	DFMR	OV/SO2/HCl Cl
156	MSA	461835 462239	Rp,Fm,Bm,ON	2	HA	SO2/HCl/Cl
159	MSA	460847 461013	Rp,Fm,Bm,ON	2	HA	OV/SO2/HCl Cl
160	MSA	460848 461014	Rp,Fm,Bm,ON	2	DFMR	OV/SO2/HCl Cl
172	Scott	6411-0015* 64-OA 6413-0015* 64E-OA 6421-0015* 64M-OA 6423-0015* 64ME-OA	Fm, ON	2		OV/SO2/HCl Cl

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
172 Cont.		6412-0015* 64S-OA 6422-0015* 64SE-OA				
174	Scott	6411-0115* 6412-0115* 6413-0115* 6421-0115* 6422-0115* 6423-0115* 64-OA-D 64E-OA-D 64M-OA-D 64ME-OA-D 64S-OA-D 64SE-OA-D 604032-15*	Fm, ON	2	DM	OV/SO2/HCl Cl
181	North	7603 7603S	Rp,Bm,ON	2		OV/SO2/Cl HCl
186	North	7613 7613S	Rp,Bm,ON	2	DM	OV/SO2/Cl HCl
207	North	7582S 7582M 7582L 7782S 7782M 7782L	Rp,ON,Fm	2	HRA	HCl/Cl/SO2
208	North	75BP82M 75BP82L	Rp,Bm,ON	2	HRA	HCl/Cl/SO2
209	North	7682 7682S	Rp,Fm,FF	2	HRA	HCl/Cl/SO2
210	North	7583S,M,L 7783S,M,L	Rp,Bm,ON	2	HRA	OV,SO2,Cl HCl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - FORMALDEHYDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
211	North	75BP83M 75BP83L	Rp,Bm,ON	2	HRA	OV/SO2/Cl HCl
212	North	7683	Rp,Bm,ON	2	HRA	OV/SO2/Cl
218	Scott	6470-0101* 6480-0101* 65-AG-D 65S-AG-D 65XL-AG-D	Rp,Fm, FF	2	DM	SO2/HCl/Cl
221	Scott	6470-0015* 6480-0015* 65-OA 65S-OA 65XL-OA	Rp,Fm, FF	2		OV/SO2/HCl Cl
222	Scott	6470-0115* 6480-0115* 65-OA-D 65S-OA-D 65XL-OA-D	Rp,Fm, FF	2	DM	OV/SO2/HCl Cl
225	Scott	6470-0001 6480-0001 65-AG 65S-AG 65XL-AG	Rp,Fm, FF	2		SO2/HCl/Cl
226	North	7502* 7502S 7702S 7502M 7702L 7502L 7702M	Rp,Fm, ON	2		SO2/HCl/Cl
227	North	75BP02* 75BP02M 75BP02L	Rp,Bm, ON	2		SO2/HCl/Cl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - FORMALDEHYDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
228	North	7602 7602S 7602N* 7602SN*	Rp,Fm, FF	2		SO2/HCl/Cl
229	North	7512* 7512S 7512M 7512L 7712S 7712M 7712L	Rp,Fm, ON	2	DM	SO2/HCl/Cl
230	North	75BP12* 75BP12M 75BP12L	Rp,Bm, ON	2	DM	SO2/HCl/Cl
231	North	7612 7612S 7612N* 7612SN*	Rp,Fm, FF	2	DM	SO2/HCl/Cl
246	Scott	6411-0301* 64-AG-F 6413-0301* 64E-AG-F 6421-0301* 64M-AG-F 6423-0301* 64ME-AG-F 6412-0301* 64S-AG-F 6422-0301* 64SE-AG-F	Rp,Fm, ON	2	DFMR	SO2/HCl/Cl
247	Scott	6470-0301* 6480-0301* 65-AG-F 65S-AG-F 65XL-AG-F	Rp,Fm, FF	2	DFMR	SO2/HCl/Cl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - FORMALDEHYDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
250	Scott	6411-0315* 64-OA-F 6413-0315* 64M-OA-F 6421-0315* 64ME-OA-F 6423-0315* 64E-OA-F 6412-0315* 64S-OA-F 6422-0315* 64SE-OA-F	Rp,Fm, ON	2	DFMR	OV/SO2/HCl Cl
251	Scott	6470-0315* 6480-0315* 65-OA-F 65S-OA-F 65XL-OA-F	Rp,Fm, FF	2	DFMR	OV/SO2/HCl Cl
260	MSA	466903	Rp,Fm, ON	2	DM	OV/SO2/HCl Cl
261	MSA	466902	Rp,Bm, ON	2	DM	OV/SO2/HCl Cl
318	Survivair	2203-00 2103-00 2303-00	Rp, FM, ON	2		OV/SO2/HCl Cl
352	North	10003S 10003M	Su,ON	1		OV/SO2/Cl HCl
353	North	10002S 10002M	Su,ON	1		SO2/Cl/HCl
356	North	10012S 10012M	Su,ON	1	DM	SO2/Cl/HCl
357	North	10013S 10013M	Su,ON	1	DM	OV/SO2/Cl HCl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - FORMALDEHYDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
372	3M	8754	Su, ON	1		
397	North	7505S* 7505M* 7505L*	Rp,Fm, ON	2		
398	North	7515S* 7515M* 7515L*	Rp,Fm, ON	2	DM	
399	North	75BP05M* 75BP05L*	Rp,Fm, ON	2		
400	North	75BP15M* 75BP15L*	Rp,Fm, ON	2	DM	
401	North	7605* 7605S*	Rp,Fm, FF	2		
402	North	7615* 7615S*	Rp,Fm, FF	2	DM	
433	Survivair	2113-00 2213-00 2313-00	Rp,Fm, ON	2	DM	OV/SO2/HCl Cl
434	Survivair	3213-00 4213-00	Rp,Fm, ON	2	DM	OV/SO2/HCl Cl
454	Survivair	3203-00 4203-00	Rp,Fm, FF	2		OV/SO2/HCl Cl
461	MSA	472749	Rp,Bm, ON	2	DM	SO2/HCl/Cl
462	MSA	472750	Rp,Bm, ON	2	DM	OV/SO2/HCl Cl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - FORMALDEHYDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
466	MSA	472756	Rp,Bm, ON	2	HA	OV/SO2/HCl Cl
467	MSA	472757	Rp,Bm, ON	2	DFMR	OV/SO2/HCl Cl
470	MSA	472760	Rp,Bm, ON	2	HA	SO2/HCl/Cl
472	MSA	472764	Rp,Bm, ON	2	DM	OV/SO2/HCl Cl
475	3M	7216	Rp,Fm, ON	2		
486	3M	8775	SU, ON	1	DM	
503	3M	7217	Rp, FM, ON	2	DM	
505	AO	R4060A S4060A R5060A S5060A R6060A S6060A R5560A S5560A R6560A S6560A	Rp,FM, ON	2		
506	AO	R7060A S7060A R7760A S7760A	Rp,FM, FF	1		

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - FORMALDEHYDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
507	AO	R4060AD S4060AD R5060AD S5060AD R6060AD S6060AD R5560AD S5560AD R6560AD S6560AD	Rp,FM, ON	2	DM	
508	AO	R7060AD S7060AD R7760AD S7760AD	Rp,FM, FF	2	DM	
511	MSA	469728	Rp,FM, ON	1	DM	OV/SO2/HCl Cl
512	MSA	469729	Rp,FM, ON	1	DM	OV/SO2/HCl Cl
517	Scott	64-AG-H 64E-AG-H 64M-AG-H 64ME-AG-H 64S-AG-H 64SE-AG-H	Rp,FM, ON	2	HRA	SO2/HCl/Cl
518	Scott	65-AG-H 65S-AG-H 65XL-AG-H	Rp,FM, FF	2	HRA	SO2/HCl/Cl
521	Scott	64-OA-H 64E-OA-H 64M-OA-H 64ME-OA-H 64S-OA-H 64SE-OA-H	Rp,FM, ON	2	HRA	OV/SO2/HCl Cl
522	Scott	65-OA-H 65S-OA-H 65XL-OA-H	Rp,FM, FF	2	HRA	OV/SO2/HCl Cl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - FORMALDEHYDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
532	Survivair	2143-00 2243-00 2343-00	Rp,FM, ON	2	DFMR	OV/SO2/HCl Cl
533	Survivair	3243-00 4243-00	Rp,FM, FF	2	DFMR	OV/SO2/HCl Cl
652	North	7592S,M,L 7792S,M,L	Rp,Fm, ON	2	DFM	SO2/HCl Cl
653	North	75BP92M 75BP92L	Rp,BM, ON	2	DFM	SO2/HCl/Cl
654	North	7692 7692S	Rp,Fm, FF	2	DFM	SO2/HCl Cl
655	North	7593S,M,L 7793S,M,L	Rp,Bm,ON	2	DFM	OV/SO2/Cl HCl
656	North	75BP93M 75BP93L	Rp,Bm,ON	2	DFM	OV/SO2/Cl HCl
657	North	7693 7693S	Rp,Bm,ON	2	DFM	OV/SO2/Cl HCl

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
697	3M	7816 7816C 7816-H 7816C-L	Rp, Fm, FF (For 7816C Combination Type C, CF) Air pressure (psig): 15 - 40; 17 - 45; 22 - 55; 25 - 70 Hose length (feet): 25 - 50; 75 - 100; 125 - 200; 225 - 300 Hose Length (ft) / Pressure Range (psig) 7816-H / 7816-L: 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0	2		
698	3M	7817 7817C 7817-H 7817C-L	Rp, Fm, FF (For 7817C Combination Type C, CF) Air pressure (psig): 15 - 40; 17 - 45; 22 - 55; 25 - 70 Hose length (feet): 25 - 50; 75 - 100; 125 - 200; 225 - 300 Hose Length (ft) / Pressure Range (psig) 7817-H / 7817-L: 25: 7.5 - 15.0 / 5.0 - 15.0 50: 8.0 - 15.0 / 5.0 - 15.0 100: 10.0 - 15.0 / 6.0 - 15.0	2	DM	
699	Willson	1226/R/S/SR/SS/SSS S1226/R/S/SR/SS/SSS	ON, Rp, Fm	2		SO2/Cl/HCl
700	Willson	1626, 1726	FF, Rp, Fm	2		SO2/Cl/HCl
701	Willson	1526, 1526R 1526SS	ON, Rp, Fm	2		SO2/Cl/HCl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - FORMALDEHYDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
702	Willson	3026/R/S/SR/SS/SSS S3026/R/S/SR/SS/SSS	ON, Rp, Bm	2		SO2/Cl/HCl
703	Willson	3126, 3226	FF, Bm, Rp	2		SO2/Cl/HCl
704	Willson	3526, 3526R 3526SS	ON, Bm, Rp	2		SO2/Cl/HCl
705	Willson	122610/R/S/SR/SS/SSS S122610/R/S/SR/SS/SSS	ON, Rp, Fm	2	DM	SO2/Cl/HCl
706	Willson	152610 152610R 152610SS	ON, Rp, Fm	2	DM	SO2/Cl/HCl
707	Willson	162610 172610	FF, Rp, Fm	2	DM	SO2/Cl/HCl
708	Willson	302610/R/S/SR/SS/SSS S302610/R/S/SR/SS/SSS	ON, Rp, Bm	2	DM	SO2/Cl/HCl
709	Willson	312610 322610	FF, Rp, Bm	2	DM	SO2/Cl/HCl
710	Willson	352610 352610R 352610SS	ON, Rp, Bm	2	DM	SO2/Cl/HCl
711	Willson	122617/R/S/SR/SS/SSS S122617/R/S/SR/SS/SSS	ON, Rp, Fm	2	DFM	SO2/Cl/HCl
712	Willson	162617 172617	FF, Rp, Fm	2	DFM	SO2/Cl/HCl

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
713	Willson	152617 152617R 152617SS	FF, Rp, Fm	2	DFM	SO2/Cl/HCl
714	Willson	302617/R/S/SR/SS/SSS S302617/R/S/SR/SS/SSS	ON, Rp, Bm	2	DFM	SO2/Cl/HCl
715	Willson	312617 322617	FF, Rp, Bm	2	DFM	SO2/Cl/HCl
716	Willson	352617 352617R 352617SS	ON, Rp, Bm	2	DFM	SO2/Cl/HCl
741	Willson	6106S 6106M 6106L	ON,Rp,Fm	2		SO2/Cl/HCl
742	Willson	6206S 6206M 6206L	ON,Rp,Fm	1		SO2/Cl/HCl
746	Willson	6406 S6406 6506 S6506	FF,Rp,Fm	2		SO2/Cl/HCl
749	Willson	6516 S6516 6416 S6416	FF,Rp,Fm	2	DM	SO2/Cl/HCl
754	Willson	6116S 6116M 6116L	ON,Rp,Fm	2	DM	SO2/Cl/HCl
757	Willson	6216S 6216M 6216L	ON,Rp,Fm	1	DM	SO2/Cl/HCl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - FORMALDEHYDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
765	Willson	6146S 6146M 6146L	Rp,Fm,ON	2	HA	SO2/Cl/HCl
766	Willson	6546 S6546 6446 S6446	Rp,Fm,FF	2	HA	SO2/Cl/HCl
768	Scott	66STC-AG S66STC-AG 66MTC-AG S66MTC-AG 66LTC-AG S66LTC-AG	Fm,Rp,ON	2		HCl/Cl SO2
769	Scott	66STC-AG-D S66STC-AG-D 66MTC-AG-D S66MTC-AG-D 66LTC-AG-D S66LTC-AG-D	Fm,Rp,ON	2	DM	HCl/Cl SO2
770	Scott	66STC-AG-F S66STC-AG-F 66MTC-AG-F S66MTC-AG-F 66LTC-AG-F S66LTC-AG-F	Fm,Rp,ON	2	DFMR	HCl/Cl SO2
771	Scott	66STC-AG-H S66STC-AG-H 66MTC-AG-H S66MTC-AG-H 66LTC-AG-H S66LTC-AG-H	Fm,Rp,ON	2	HRA	HCl/Cl SO2
776	Scott	66STC-OA S66STC-OA 66MTC-OA S66MTC-OA 66LTC-OA S66LTC-OA	Fm,Rp,ON	2		HCl/Cl/OV SO2

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
777	Scott	66STC-OA-D S66STC-OA-D 66MTC-OA-D S66MTC-OA-D 66LTC-OA-D S66LTC-OA-D	Fm,Rp,ON	2	DM	HCl/Cl/OV SO2
778	Scott	66STC-OA-F S66STC-OA-F 66MTC-OA-F S66MTC-OA-F 66LTC-OA-F S66LTC-OA-F	Fm,Rp,ON	2	DFMR	HCl/Cl/OV SO2
779	Scott	66STC-OA-H S66STC-OA-H 66MTC-OA-H S66MTC-OA-H 66LTC-OA-H S66LTC-OA-H	Fm,Rp,ON	2	HRA	HCl/Cl/OV SO2
789	Willson	6126S 6126M 6126L	Rp,Fm,ON	2	DFMR	SO2/Cl/HCl
790	Willson	6426 S6426 6526 S6526	Rp,Fm,FF	2	DFMR	SO2/Cl/HCl
804	AO	S7560A S7560AC	FF,Rp,Fm	2 For S7560AC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37		
811	AO	S7560AD S7560ADC	FF,Rp,Fm	2 For S7560ADC Comb. Type C, CF Hose Length feet: 25 - 300 Press. Range psig: 14 - 37	DM	

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
829	Willson	6226S 6226M 6226L	Rp,Fm,ON	1	DFM	SO2/Cl/HCl
832	MSA	484475	FF,Rp,Fm	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	DM	SO2/Cl/HCl
833	MSA	484476	FF,Rp,Fm	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	DM	OV/SO2/HCl Cl
836	MSA	484480	FF,Rp,Fm	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	HA	SO2/Cl/HCl
837	MSA	484488	FF,Rp,Fm	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	DM	OV/SO2/HCl Cl
839	MSA	484481	Rp,Fm,FF	2 Comb. Type C, Pd Hose Length feet: 8 - 300 Press. Range psig: 65 - 85	HA	OV/SO2/HCl Cl

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
843	MSA	483992	Rp,Fm,FF	2	DM	Cl/HCl SO2
				Comb. Hose Length (feet) 8-300	Type C, CF Press. Range psig 35 - 40	
844	MSA	483993	Rp,Fm,FF	2	DM	OV/Cl/HCl SO2
				Comb. Hose Length (feet) 8-300	Type C, CF Pressure psig 35 - 40	
851	MSA	483997	Rp,Fm,FF	2	HA	Cl/HCl SO2
				Comb. Hose Length (feet) 8-300	Type C, CF Pressure psig 35 - 40	
852	MSA	484005	Rp,Fm,FF	2	DM	OV/Cl/HCl SO2
				Comb. Hose Length (feet) 8-300	Type C, CF Pressure psig 35 - 40	
853	MSA	483999	Rp,Fm,FF	2	DFMR	OV/Cl/HCl SO2
				Comb. Hose Length (feet) 8-300	Type C, CF Pressure psig 35 - 40	
854	MSA	483998	Rp,Fm,FF	2	HRA	OV/Cl/HCl SO2
				Comb. Hose Length (feet) 8-300	Type C, CF Pressure psig 35 - 40	

POWERED AIR PURIFYING RESPIRATORS

F. Powered Air Purifiers

1. Gas Masks

Approval

See approval label for specific approval information and limitations.

Limitations

For respirators evaluated and approved by MSHA under Part 18:

Not evaluated as an ignition source in flammable or explosive atmospheres by MSHA/NIOSH, except evaluated under Part 18 for use in methane air atmospheres.

For respirators not approved under Part 18:

Not evaluated as an ignition source in flammable or explosive atmospheres by MSHA/NIOSH.

Not for use in atmospheres containing less than 19.5 percent oxygen.

Not for use in atmospheres immediately dangerous to life or health.

(Tight Fitting Facepiece). Do not use if airflow is less than four cubic feet per minute.

(Loose Fitting Hoods or Helmets). Do not use if airflow is less than six cubic feet per minute.

In making renewal and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instructions and maintenance manual for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing canisters.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

POWERED AIR PURIFYING GAS MASKS - OV

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
122	Racal	BE 3/A BE 7/A	PAPR	FF		

POWERED AIR PURIFYING GAS MASKS - CHLORINE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
123	Racal	BE 3/B BE 7/B	PAPR	FF		HCl

POWERED AIR PURIFYING GAS MASKS - AMMONIA

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
132	Racal	BE 3/K BE 7/K	PAPR	FF		MA

POWERED AIR PURIFYING GAS MASKS - METHYLAMINE

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
132	Racal	BE 3/K BE 7/K	PAPR	FF		NH3

POWERED AIR PURIFYING GAS MASKS - ACID GAS

Approval Number TC-14G-	Approval Issued to	Model Number(s)	Respirator Type	Facepiece Type	DFM Approval	Other gas and Vapor Approval
133	Racal	BE 3/E BE 7/E	PAPR	FF		

2. Particulate

Approval

See approval label for specific approval information and limitations.

Limitations

For respirators evaluated and approved by MSHA under Part 18:

Not evaluated as an ignition source in flammable or explosive atmospheres by MSHA/NIOSH, except evaluated under Part 18 for use in methane air atmospheres.

For respirators not approved under Part 18:

Not evaluated as an ignition source in flammable or explosive atmospheres by MSHA/NIOSH.

Not for use in atmospheres containing less than 19.5 percent oxygen.

Not for use in atmospheres immediately dangerous to life or health.

(Tight Fitting Facepiece). Do not use if airflow is less than four cubic feet per minute.

(Loose Fitting Hoods or Helmets). Do not use if airflow is less than six cubic feet per minute.

In making renewal and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to aproval label and instructions and maintainence manual for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing filters.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

POWERED AIR PURIFYING PARTICULATE RESPIRATORS - DUSTS AND MISTS

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
197	Racal	AH5	PAPR, HH	1	Z
211	Racal	AH21 AH15	PAPR, HH	1	Z
235	3M	W-325*	PAPR, HH	1	Z,AB
294	Neoterik	AB5 HH5	PAPR, HH	1	
295	Neoterik	AB6 VB6 VH6 HH6 SH6 SB6	PAPR, HH	1	
298	Racal	DM1 BR DM1 WR DM1 BL DM1 WL DM1 BRU DM1 WRU DM1 BLU DM1 WLU	PAPR, HH	1	Z
299	Racal	DM3-S DM3-U	PAPR, HH	1	Z
318	3M	W425	PAPR, HH	1	Z,AB

POWERED AIR PURIFYING PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
136A	3M	W-250*	PAPR, HH	1	R
		W-252*			
		W-254*			
		W-260-12			
		W-260-24*			
		W-261-12 S*/M/L			
		W-261-24 S*/M*/L*			
		W-266-12			
		W-266-24*			
		W-267*			
		W-278-12			
		W-278-24*			
		W-350*			
		W-349-12			
		W-289-12			
		W-289-24*			
		W-290*			
		W-295-12*			
		W-295-24*			
		W-297*			
		W-349-24*			
137	3M	W-251*	PAPR, HH	1	AB
		W-252			
		W-265-12			
		W-265-24*			
186	MSA	463353	PAPR, FF	2	A
		467963			
		463354			
		463355			
		466607			
		466608			
		467964			
212	Racal	AH3	PAPR, HH	2	A, R
		AH3-1			
		AH3B			
		AH3B-1			
		AH17			
		AH17-1			

POWERED AIR PURIFYING PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
237	Racal	AC3	PAPR, HH	2	A, R
246	3M	W-344	PAPR, HH	1	A
263	Neoterik	AB4 HH4 VH4 VB4 SB4 SH4	PAPR, HH	1	A, R
269	Neoterik	GET GEE GVT GVE GST GSE	PAPR, HH	1	A, R
270	Neoterik	AB10 HH10 SB10 VB10 VH10 SH10	PAPR, HH	1	A, R
275	Racal	BE 1/P3	PAPR, HH	3	A, R
276	Racal	BE 3/P3 BE 7/P3	PAPR, FF	3	A, R
277	Racal	BE 5/P3	PAPR, HH	3	A, R
278	Racal	BE 6/P3	PAPR, HH	3	A, R
285	Neoterik	AB8 HH8 VB8 VH8 SB8 SH8	PAPR, HH	1	A, R

POWERED AIR PURIFYING PARTICULATE RESPIRATORS - HIGH EFFICIENCY

Approval Number TC-21C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Filters	Other Approvals
321	Racal	BE17/P3	PAPR, HH	3	A, R
324	Racal	BE8/P3	PAPR, ON	3	A, R
327	Neoterik	NP1562-1	PAPR, ON	3	A, R
329	Racal	BE4/P3	PAPR, HH	3	A, R
330	Neoterik	NP1664-1 NP1564-2 1964-1	PAPR, FF	3	A, R
353	Racal	PF/PP/7SP3	FF, PAPR	1	A, R
402	Neoterik	1801 1801-1 1801-2 1801-3 1801-4	PAPR,HH		A,R
403	Neoterik	1801-6	PAPR,ON	1	A,R
404	Neoterik	1801-5	PAPR,FF	1	A,R
405	Neoterik	1900	PAPR,FF	3	A,R
408	Neoterik	1900-1-PD 1900-2-PD 1900-3-PD	PAPR,FF	3	A,R

Valve	Air Press. psig	Comb. Type C, Pd Hose Length feet
1840	11-26	50-300
1841	30-47	50-300
1842	45-66	50-300

3. Chemical Cartridges

Approval

See approval label for specific approval information and limitations

Limitations

For respirators evaluated and approved by MSHA under Part 18:

Not evaluated as an ignition source in flammable or explosive atmospheres by MSHA/NIOSH, except evaluated under Part 18 for use in methane air atmospheres.

For respirators not approved under Part 18:

Not evaluatd as an ignition source in flammable or explosive atmospheres by MSHA/NIOSH.

Not for use in atmospheres containing less than 19.5 percent oxygen.

Not for use in atmospheres immediately dangerous to life or health.

(Tight Fitting Facepiece). Do not use if airflow is less than four cubic feet per minute.

(Loose Fitting Hoods or Helmets). Do not use if airflow is less than six cubic feet per minute.

In making renewal and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to aproval label and instructions and maintenance manual for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

POWERED AIR PURIFYING CHEMICAL CARTRIDGES - AMMONIA

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
589	Racal	BE 1/K	PAPR, HH	3		MA
590	Racal	BE 3/KC BE 7/KC	PAPR, FF	3		MA
591	Racal	BE 5/K	PAPR, HH	3		MA
592	Racal	BE 6/K	PAPR, HH	3		MA
612	Racal	BE8/K	PAPR, ON	3		MA
628	Neoterik	NP1562-8	PAPR, ON	3		MA
633	Racal	BE4/K	PAPR, HH	3		MA
639	Neoterik	NP1664-8 NP1564-8 1964-8	PAPR, FF	3		MA
641	Racal	BE1/KP3	PAPR, HH	3	HRA	MA
642	Racal	BE3/KP3 BE7/KP3	PAPR, FF	3	HRA	MA
643	Racal	BE4/KP3	PAPR, HH	3	HRA	MA
644	Racal	BE5/KP3	PAPR, HH	3	HRA	MA
645	Racal	BE6/KP3	PAPR, HH	3	HRA	MA
646	Racal	BE8/KP3	PAPR, ON	3	HRA	MA

POWERED AIR PURIFYING CHEMICAL CARTRIDGES - METHYL AMINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
589	Racal	BE 1/K	PAPR, HH	3		NH3
590	Racal	BE 3/KC BE 7/KC	PAPR, FF	3		NH3
591	Racal	BE 5/K	PAPR, HH	3		NH3
592	Racal	BE 6/K	PAPR, HH	3		NH3
612	Racal	BE8/K	PAPR, ON	3		NH3
628	Neoterik	NP1562-8	PAPR, ON	3		NH3
633	Racal	BE4/K	PAPR, HH	3		NH3
639	Neoterik	NP1664-8 NP1564-8 1964-8	PAPR, FF	3		NH3
641	Racal	BE1/KP3	PAPR, HH	3	HRA	NH3
642	Racal	BE3/KP3 BE7/KP3	PAPR, FF	3	HRA	NH3
643	Racal	BE4/KP3	PAPR, HH	3	HRA	NH3
644	Racal	BE5/KP3	PAPR, HH	3	HRA	NH3
645	Racal	BE6/KP3	PAPR, HH	3	HRA	NH3
646	Racal	BE8/KP3	PAPR, ON	3	HRA	NH3

POWERED AIR PURIFYING CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
479	Racal	BE 1/B	PAPR,HH	3		HCl
480	Racal	BE 5/B	PAPR,HH	3		HCl
481	Racal	BE 6/B	PAPR,HH	3		HCl
534	Racal	BE3/BC BE7/BC	PAPR, FF	3		HCl
593	Racal	BE 1/E	PAPR, HH	3		SO2/HCl
594	Racal	BE 3/EC BE 7/EC	PAPR, FF	3		SO2/HCl
595	Racal	BE 5/E	PAPR, HH	3		SO2/HCl
596	Racal	BE 6/E	PAPR, HH	3		SO2/HCl
597	Racal	BE 1/EP3	PAPR, HH	3	HRA	SO2/HCl
598	Racal	BE 3/EP3 BE 7/EP3	PAPR, FF	3	HRA	SO2/HCl
599	Racal	BE 5/EP3	PAPR, HH	3	HRA	SO2/HCl
600	Racal	BE6/EP3	PAPR, HH	3	HRA	SO2/HCl
603	Racal	BE17/P3	PAPR, HH	3	HRA	SO2/HCl
605	Racal	BE1/AE	PAPR, HH	3		OV/SO2/HCl
606	Racal	BE3/AE BE7/AE	PAPR, FF	3		OV/SO2/HCl
607	Racal	BE5/AE	PAPR, HH	3		OV/SO2/HCl

POWERED AIR PURIFYING CHEMICAL CARTRIDGES - CHLORINE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
608	Racal	BE6/AE	PAPR, HH	3		OV/SO2/HCl
610	Racal	BE8/B	PAPR, ON	3		HCl
613	Racal	BE8/E	PAPR, ON	3		SO2/HCl
614	Racal	BE8/EP3	PAPR, ON	3	HRA	SO2/HCl
615	Racal	BE8/AE	PAPR, ON	3		OV/SO2/HCl
626	Neoterik	NP1562-7	PAPR, ON	3		OV/SO2/HCl
627	Neoterik	NP1562-6	PAPR, ON	3		SO2/HCl
631	Racal	BE4/B	PAPR, HH	3		HCl
634	Racal	BE4/E	PAPR, HH	3		SO2/HCl
635	Racal	BE4/EP3	PAPR, HH	3	HRA	SO2/HCl
636	Racal	BE4/AE	PAPR, HH	3		OV/SO2/HCl
638	Neoterik	NP1664-7 NP1564-7 1964-7	PAPR, FF	3		OV/SO2/HCl
640	Neoterik	NP1664-6 NP1564-6 1964-6	PAPR, FF	3		SO2/HCl
647	Racal	BE3/AEP3 BE7/AEP3	PAPR, FF	3	HRA	OV/SO2/HCl
648	Racal	BE8/AEP3	PAPR, ON	3	HRA	OV/SO2/HCl

POWERED AIR PURIFYING CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
479	Racal	BE 1/B	PAPR,HH	3		Cl
480	Racal	BE 5/B	PAPR,HH	3		Cl
481	Racal	BE 6/B	PAPR,HH	3		Cl
534	Racal	BE3/BC BE7/BC	PAPR, FF	3		Cl
593	Racal	BE 1/E	PAPR, HH	3		SO2/Cl
594	Racal	BE 3/EC BE 7/EC	PAPR, FF	3		SO2/Cl
595	Racal	BE 5/E	PAPR, HH	3		SO2/Cl
596	Racal	BE 6/E	PAPR, HH	3		SO2/Cl
597	Racal	BE 1/EP3	PAPR, HH	3	HRA	SO2/Cl
598	Racal	BE 3/EP3 BE 7/EP3	PAPR, FF	3	HRA	SO2/Cl
599	Racal	BE 5/EP3	PAPR, HH	3	HRA	SO2/Cl
600	Racal	BE6/EP3	PAPR, HH	3	HRA	SO2/Cl
603	Racal	BE17/P3	PAPR, HH	3	HRA	SO2/Cl
605	Racal	BE1/AE	PAPR, HH	3		OV/SO2/Cl
606	Racal	BE3/AE BE7/AE	PAPR, FF	3		OV/SO2/Cl
607	Racal	BE5/AE	PAPR, HH	3		OV/SO2/Cl

POWERED AIR PURIFYING CHEMICAL CARTRIDGES - HYDROGEN CHLORIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
608	Racal	BE6/AE	PAPR, HH	3		OV/SO2/Cl
613	Racal	BE8/E	PAPR, ON	3		SO2/Cl
614	Racal	BE8/EP3	PAPR, ON	3	HRA	SO2/Cl
615	Racal	BE8/AE	PAPR, ON	3		OV/SO2/Cl
626	Neoterik	NP1562-7	PAPR, ON	3		OV/SO2/Cl
627	Neoterik	NP1562-6	PAPR, ON	3		SO2/Cl
631	Racal	BE4/B	PAPR, HH	3		Cl
634	Racal	BE4/E	PAPR, HH	3		SO2/Cl
635	Racal	BE4/EP3	PAPR, HH	3	HRA	SO2/Cl
636	Racal	BE4/AE	PAPR, HH	3		OV/SO2/Cl
638	Neoterik	NP1664-7 NP1564-7 1964-7	PAPR, FF	3		OV/SO2/Cl
640	Neoterik	NP1664-6 NP1564-6 1964-6	PAPR, FF	3		SO2/Cl
647	Racal	BE3/AEP3 BE7/AEP3	PAPR, FF	3	HRA	OV/SO2/Cl
648	Racal	BE8/AEP3	PAPR, ON	3	HRA	OV/SO2/Cl

POWERED AIR PURIFYING CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
593	Racal	BE 1/E	PAPR, HH	3		HCl/Cl
594	Racal	BE 3/EC BE 7/EC	PAPR, FF	3		HCl/Cl
595	Racal	BE 5/E	PAPR, HH	3		HCl/Cl
596	Racal	BE 6/E	PAPR, HH	3		HCl/Cl
597	Racal	BE 1/EP3	PAPR, HH	3	HRA	HCl/Cl
598	Racal	BE 3/EP3 BE 7/EP3	PAPR, FF	3	HRA	HCl/Cl
599	Racal	BE 5/EP3	PAPR, HH	3	HRA	HCl/Cl
600	Racal	BE6/EP3	PAPR, HH	3	HRA	HCl/Cl
603	Racal	BE17/EP3	PAPR, HH	3	HRA	HCl/Cl
605	Racal	BE1/AE	PAPR, HH	3		OV/HCl/Cl
606	Racal	BE3/AE BE7/AE	PAPR, FF	3		OV/HCl/Cl
607	Racal	BE5/AE	PAPR, HH	3		OV/HCl/Cl
608	Racal	BE6/AE	PAPR, HH	3		OV/HCl/Cl
613	Racal	BE8/E	PAPR, ON	3		HCl/Cl
614	Racal	BE8/EP3	PAPR, ON	3	HRA	HCl/Cl
615	Racal	BE8/AE	PAPR, ON	3		OV/HCl/Cl

POWERED AIR PURIFYING CHEMICAL CARTRIDGES - SULFUR DIOXIDE

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
626	Neoterik	NP1562-7	PAPR, ON	3		OV/HCl/Cl
627	Neoterik	NP1562-6	PAPR, ON	3		HCl/Cl
634	Racal	BE4/E	PAPR, HH	3		HCl/Cl
635	Racal	BE4/EP3	PAPR, HH	3	HRA	HCl/Cl
636	Racal	BE4/AE	PAPR, HH	3		OV/HCl/Cl
638	Neoterik	NP1664-7 NP1564-7 1964-7	PAPR, FF	3		OV/HCl/Cl
640	Neoterik	NP1664-6 NP1564-6 1964-6	PAPR, FF	3		HCl/Cl
647	Racal	BE3/AEP3 BE7/AEP3	PAPR, FF	3	HRA	OV/HCl/Cl
648	Racal	BE8/AEP3	PAPR, ON	3	HRA	OV/HCl/Cl

POWERED AIR PURIFYING CHEMICAL CARTRIDGES - ORGANIC VAPORS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
476	Racal	BE 1/A	PAPR, H/H	3		
477	Racal	BE 5/A	PAPR, H/H	3		
478	Racal	BE 6/A	PAPR, H/H	3		
482	Racal	BE 1/AP3	PAPR, H/H	3	HRA	pest
483	Racal	BE 3/AP3 BE 7/AP3	PAPR, FF	3	HRA	pest
484	Racal	BE 5/AP3	PAPR, HH	3	HRA	pest
485	Racal	BE 6/AP3	PAPR, HH	3	HRA	pest
535	Racal	BE3/AC BE7/AC	PAPR, FF	3		
602	Racal	BE17/AP3	PAPR, HH	3	HRA	pest
605	Racal	BE1/AE	PAPR, HH	3		SO2/HCl/Cl
606	Racal	BE3/AE BE7/AE	PAPR, FF	3		SO2/HCl/Cl
607	Racal	BE5/AE	PAPR, HH	3		SO2/HCl/Cl
608	Racal	BE6/AE	PAPR, HH	3		SO2/HCl/Cl
611	Racal	BE8/AP3	PAPR, ON	3	HRA	pest
615	Racal	BE8/AE	PAPR, ON	3		SO2/HCl/Cl
625	Neoterik	NP1562-5	PAPR, ON	3		

POWERED AIR PURIFYING CHEMICAL CARTRIDGES - ORGANIC VAPORS

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
626	Neoterik	NP1562-7	PAPR, ON	3		SO2/HCl/Cl
630	Racal	BE4/A	PAPR, HH	3		
632	Racal	BE4/AP3	PAPR, HH	3	HRA	Pest
636	Racal	BE4/AE	PAPR, HH	3		SO2/HCl/Cl
637	Neoterik	NP1664-5 NP1564-5 1964-5	PAPR, FF	3		
638	Neoterik	NP1664-7 NP1564-7 1964-7	PAPR, FF	3		SO2/HCl/Cl
647	Racal	BE3/AEP3 BE7/AEP3	PAPR, FF	3	HRA	SO2/HCl/Cl
648	Racal	BE8/AEP3	PAPR, ON	3	HRA	SO2/HCl/Cl

POWERED AIR PURIFYING CHEMICAL CARTRIDGES - PESTICIDES

Approval Number TC-23C-	Approval Issued to	Model Number(s)	Respirator and Facepiece Type	Number of Cartridges	Other Approvals DFM	Gas and Vapor
482	Racal	BE 1/AP3	PAPR, H/H	3	HRA	OV
483	Racal	BE 3/AP3 BE 7/AP3	PAPR, FF	3	HRA	OV
484	Racal	BE 5/AP3	PAPR, HH	3	HRA	OV
485	Racal	BE 6/AP3	PAPR, HH	3	HRA	OV
602	Racal	BE17/AP3	PAPR, HH	3	HRA	OV
611	Racal	BE8/AP3	PAPR, ON	3	HRA	OV
632	Racal	BE4/AP3	PAPR, HH	3	HRA	OV
682	Kasco	K80S-T4	PAPR, HH	3		
767	Kasco	K80S-T5N BP 3-2 K80E-T5N/BP3	PAPR,HH	3		

VINYL CHLORIDE RESPIRATORS (11)

G. Vinyl Chloride

Approval

Approved as respiratory protection against 10 parts per million vinyl chloride.

Limitations

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instruction for changing sorbent element.

This respirator shall be carefully fitted to the wearer's face before use, in accordance with the manufacturer's facepiece fitting instructions.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

VINYL CHLORIDE RESPIRATORS

Approval number TC-11-	Approval issued to	Model number(s)	Respirator type	Face-piece type
1	Scott	601460-01 601460-03 601460-11 601460-13	Bm	ON

NAMES AND ADDRESSES OF MANUFACTURERS AND DISTRIBUTORS

A-BEC Industries
1864 Vanderhorn Drive
Memphis, TN 38134

Ace Enterprises
820 Northwest 144th St.
Miami, FL 33168

Acme Automotive Finishes
101 Prospect Ave.
Cleveland, OH 44115

Air Components and Equipment, Inc.
P.O. Box 16988
Tampa, FL 33687

Air-Tek Development Co.
P.O. Box 66, Highway No. 37
Hibbing, MN 55746

Airolife Safety, Inc.
1601 E. 361st Street
Eastlake, Ohio 44094

American Optical Corp.
Safety Products Div.
14 Mechanic Street
Southbridge, MA 01550

Anderson Manufacturing Co.
1014 Fox Chase Road
Rockledge, PA 19111

Auergesellschaft GMBH
1000 Berlin 65 (West)
Friedrich - Krause - Ufer 24

Balkamp Incorporated
Indianapolis, IN 46241

Binks Manufacturing Co.
9201 W. Belmont Ave.
Franklin Park, IL 60131

Biosystems, Inc.
Pistol Shop Road
Rockfall, CT 06481

Bowen Tools, Inc.
P.O. Box 3186
Houston, TX 77001

Bullard, E. D., Co.
3320 White Oak Pike
Cynthiana, KY 41031-0187

CSE Corporation
600 Seco Road
Monroeville, PA 15146

Canadian Technical Tape
455 Cote Vertu Rd.
Montreal H4N 1EB, CANADA

Cesco Safety Products
Parmelee Industries, Inc.
P.O. Box 1237
Kansas City, MO 64141

Clark Sand Company, Inc.
P.O. Box 4267
No. Erhmann Street
Pensacola, FL 32507

Clemco Industries
1950 Elkhorn Court
San Mateo, CA 94120

Clemco Industries
3938 Swinnea Road
Memphis, TN 38118

Clemtex, Ltd.
248 McCarthy Drive
Houston, TX 77020

Dan Am (SATA)
Highway 16-63 North
Spring Valley, MN 55975

Defense Apparel
285 Murphy Road
Hartford, CT 06114

DeVilbiss Company
300 Phillips Ave.
P.O. Box 913
Toledo, OH 43692

NAMES AND ADDRESSES OF MANUFACTURERS AND DISTRIBUTORS

Dragerwerk, AG
D-24 Luebeck 1
Postfach 1339
2400 Luebeck 1
West Germany

Dual Safe Life Support Systems, Inc.
P.O. Box 873
2315 West Main Street
Baytown, Texas 77520

E. I. DuPont deNemours & Co.
Wilmington, DE 19898

Eastern Safety Equipment Co.
45-17 Pearson St.
Long Island City, NY 11101

Empire Abrasive Equipment Corp.
990 Gantry Road
Philadelphia, PA 19115

Encon Manufacturing Co.
13333 Northwest Freeway
P.O. Box 3826
Houston, TX 77007

Fiber-Metal, P.O. Box 248
Concordville, PA 19331

Gerson, Louis
15 Sproat Street
Middleboro, MA 02346

Glendale Protective Technologies Inc.
130 Crossways Park Drive
Woodbury, NY 11797

Globe Safety Products, Inc.
125 Sunrise Place
P.O. Box 7248
Dayton, OH 45407

International Safety Devices
16717 Smoketree Street
Hesperia, CA 92345

International Safety Instruments, Inc.
480 Perry Street
P.O. Box 846
Lawrenceville, GA 30246

Interspiro USA, Inc.
11 Business Park Drive
Branford, CT 06405

Jackson Products
5801 Safety Drive
Belmot, MI 49306

Kasco Inc.
Via Romania, 12
42100 Reggio Emilia
ITALY

Kelco Sales & Engineering Co.
P.O. Box 422
Norwalk, CA 90650

Key Houston, Inc.
13911 Atlanta Blvd.
Jacksonville, FL 32225

Koken, Ltd.
7, Yonbancho, Chiyoda-Ku
Tokyo, 102 JAPAN

Lancs Industries, Inc.
12704 NE 124th St.
Kirkland, WA 98003-4091

Mafter Inc.
8111 Edison
Ville d'Anjou MTI
Quebec, Canada H1J LS9

The Marthens Company
1044 S. Dittmer Street
Davenport, IA 52802

Mohawk Industrial Supply Company
P.O. Box 945
Manchester, CT 06040

Moldex-Metric Inc.
4671 Leahy Street
Culver City, CA 90230

Mine Safety Appliances Co.
P.O. Box 426
Pittsburgh, PA 15230

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3M Center
Building 230-B
St. Paul, MN 55144-1000

National Draeger, Inc.
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Pittsburgh, PA 15230

National Mine Service
4900/600 Grant Street
Pittsburgh, PA 15219

Neoterik Health Tech., Inc.
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Woodsboro, MD 21798

New England Thermoplastics
15 Union Street-Stone Mill
P.O. Box 490
Lawrence, MA 01842-1090

North Safety Equipment
2000 Plainfield Pike
Cranston, RI 02920

Northcott Products Co.
1826 W. Diversey Parkway
Chicago, IL 60614

O-Two Systems International
7575 Kimbel Street
Mississauga, Ontario
CANADA L5S 1C8

Nuclear Power Outfitters
P.O. Box 737
Crystal Lake, Illinois 60014

Ocenco, Inc.
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Route 22, East
Blairsville, PA 15717

Parmelee Industries, Inc.
1535 Walnut Street
Kansas City, MO 64141

Pauli & Griffin
137 Utah Ave.
South San Francisco, CA 94080

Industrie Pirelli
Azienda Articoli Vari Roma
Via di Torrespaccata 140, 00169
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Portable Air Supply Systems Corp.
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Cleveland, OH 44115

Porter Warner Industries
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P.O. Box 2158
Chattanooga, TN 37409

Protech Respirators, Inc.
107 East Alexander St.
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Buchanan, MI 49107

Pulmosan Protective Equipment Corp.
P.O. Box 622
Reading, PA 19603

Racal Airstream, Inc.
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Frederick, MD 21701

Respiratory Systems
18102 Sky Park South J
Irvine, CA 92714

Rexnord Electronic Products, Inc.
45 Great Valley Center
Malvern, PA 19355-9990

Romiro Technology
3500 Carnegie Avenue
Cleveland, OH 44115

Safe-Tex
Toronto, Ontario
CANADA

Safety and Supply Co.
5510 East Marginal Way South
Seattle, WA 98134

Safety Supply Co.
Toronto, Ontario
Canada

NAMES AND ADDRESSES OF MANUFACTURERS AND DISTRIBUTORS

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Surrey RH1 2PA
UNITED KINGDOM

Schmidt Manufacturing Inc.
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Houston, TX 77045

Scott Aviation
A Figgie International Company
225 Erie Street
Lancaster, NY 14086

Sellstrom Manufacturing Co.
59 E. Van Buren St.
Chicago, IL 60605

Shoplyne Safety Products
Cleveland, Ohio 44107

Siebe-Norton Safety Products
2000 Plainfield Pike
Cranston, RI 02920

Siebe Gorman, Ltd.
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NP4, 1YR, Chessington Surrey
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Standard Safety Equipment Corp.
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Stewart-Warner
Chicago, IL

Sulliblast
Division of Sullair, Inc.
105 Lauren Drive
Belle Chase, LA 70037

Survivair
A Division of Comasec Inc.
3323 W. Warner Ave.
Santa Ana, CA 92704

Titan Abrasive Systems, Inc.
P.O. Box 3
Furlong, PA 18925

United States Safety Service
Parmelee Industries, Inc.
P.O. Box 1237
Kansas City, MO 64141

Vortec Corporation
10125 Carver Road
Cincinnati, OH 45242

Willson Safety Products
P.O. Box 622
Reading, PA 19603

Zee Medical Products Co.
Irvine, CA 92714

A P P E N D I X

Appendix: NIOSH RESPIRATOR PROBLEM INVESTIGATION

Since July 1, 1982, NIOSH has been investigating reports of problems with MSHA/NIOSH-certified respirators that are received from NIOSH audits, regulatory agencies, and users and manufacturers of respirators. Through the cooperative efforts of reporters, NIOSH, and the respirator manufacturers, a number of serious respirator problems have been resolved, improvements have been made in respirator design and performance, and respirator users have been advised where incorrect respirator use has been found.

The goals of the program are to maintain an effective problem reporting and resolution system, to increasingly justify the user's reliance on the MSHA/NIOSH respirator approval program, and to indicate to respirator manufacturers that NIOSH is sincere in its desire to increase the safety and reliability of certified respirators. The following is an up-to-date list of the names and addresses of persons who are responsible for investigation of problems with MSHA/NIOSH-certified respirators:

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