

DATA DICTIONARY

Table 1. Synthetic blood penetration for N95 filtering facepiece respirators, surgical N95 respirators and surgical masks.

Field Name	Contents
Filter Type	Filtering facepiece respirators (FFR), Surgical N95 respirator (SM/FFR) and surgical masks (SM) tested for fluid resistance
Model	Manufacturer and model of device
Synthetic Blood Penetration	Synthetic blood used for penetration resistance measurement
450 cm/sec	Velocity recommended by FDA for lower fluid resistance category masks
635 cm/sec	Velocity recommended by FDA for higher fluid resistance category masks
Total#	Total number of samples tested
Pass	The absence of synthetic blood on the inner side of test device
Fail	The presence of synthetic blood on the inner side of test device

Table 2. Comparison of blood penetration results from NIOSH and the third party independent (TPI) test laboratory (Percentage of samples passed)

Field Name	Contents
Filter Type	Type of respiratory device tested in the study
Model	Manufacturer and model of device
NIOSH	NIOSH test results showing the percentage of devices resistant to fluid penetration
TPI	TPI (third Party Independent) laboratory test results showing the percentage of devices resistant to penetration as measured by
450 cm/sec	The velocity recommended by FDA for lower fluid resistance category masks
635 cm/sec	The velocity recommended for higher fluid resistance category masks

Table 3. Synthetic blood penetration for N95 filtering facepiece respirators, surgical N95s and surgical masks. Combined test results at two velocities from the NIOSH laboratory and the third party independent laboratory.

Field Name	Contents
Filter Type	Filtering facepiece respirators (FFR), Surgical N95 respirator (SM/FFR) and surgical masks (SM) tested for fluid resistance
Model	Manufacturer and model of device
450 cm/sec	FDA recommended test velocity for lower resistance category masks
Total#	Total number of samples tested
Pass	The absence of synthetic blood on the inner side of device
Fail	The presence of synthetic blood on the inner side of device
Pass (%)	Percentage of samples that passed the test
635 cm/sec	FDA recommended test velocity for higher resistance category masks
Total#	Total number of samples tested

Pass	The absence of synthetic blood on the inner side of test device
Fail	The presence of synthetic blood on the inner side of device
Pass (%)	Percentage of samples that passed the test

Table 4. Synthetic blood penetration through N95 FFRs, surgical N95 FFRs, surgical masks, powered air purifying respirator (PAPR) hoods and surgical head covers.

Field Name	Contents
Test Materials	Manufacturer and models of N95 filtering facepieces (FFRs), surgical N95 (surgical N95 respirators), surgical masks, PAPR (powered air-purifying respirator) hoods and head covers
Number of samples (per model)	Number of samples of each model tested for synthetic blood penetration
Resistance to synthetic blood penetration-Pass Surface tension (dynes)/viscosity (cP) 45 dynes/8 cP 1 ml 450 cm/sec 2 ml 450 cm/sec and 635 cm/sec	Synthetic blood penetration pass at 45 dynes/8.0 cP with 1 ml at 450 cm/sec velocity 2 ml at 450 cm/sec and 635 cm/sec velocities
Resistance to synthetic blood penetration-Pass 58 dynes/3.5 cP 450 cm/sec 2 ml	Synthetic blood penetration pass at 58 dynes/3.5 cP with 2 ml volume at 450 cm/sec velocity

Table 5. Flammability of Respirator, and other PPE manufacturers, models and design.

Field Name	Contents
Type	N95 (N95 Filtering facepiece respirators), Surgical N95 (surgical N95 respirators), surgical mask, surgical head cover and PAPR (powered air-purifying respirator) hood materials tested for flammability
Manufacturer	Manufacturer of each type of device used for flammability testing
Model	Models of each category device tested for flammability
Design	Design of each model tested for flammability

Table 6. Flammability class of N95 filtering facepiece respirator (N95 FFR), surgical N95 respirator (Surgical N95), surgical mask (SM), head cover and PAPR hoods.

Field Name	Contents
Respiratory Device	N95 FFR (N95 Filtering facepiece respirators), Surgical N95 (Surgical N95 respirator), SM (surgical masks), surgical head

	cover and PAPR (powered air-purifying respirator) hood materials tested for flammability
NIOSH Models Burn Time (Sec) Flammability Class	National Institute for Occupational Safety and Health test results: Number of models from each device tested for flammability Burning time in seconds measured by the test Flammability class assigned based on average burn time
TPI Models Burn Time (Sec) Flammability Class	Third party independent laboratory test results: Number of models from each device tested for flammability Burning time in seconds measured by the test Flammability class assigned based on average burn time

Table 7. Flammability class of N95 respirators, surgical N95 respirators, surgical masks, and other fabric materials.

Field Name	Contents
Respiratory Devices and Fabric Materials	N95 FFRs (N95 Filtering facepiece respirators), Surgical N95 FFRs (Surgical N95 respirators), surgical masks, cotton, linen and other fabric materials
Weight (g/m ²)	Weight of the materials in (g/m ²)
Average Burn Time (Sec)	Average burn time in seconds measured by the 16 CFR 1610 standard test method
Flammability Class	Flammability class assigned based on average burn time

Table 8. Surgical N95 respirator model, design, and manufacturer

Field Name	Contents
Model	Surgical N95 respirator models
Design	Shape and design of the surgical N95 respirator models
Manufacturer	Manufacturer of the surgical N95 respirator models

Table 9. Shape change of surgical N95 respirators using a medium head form at 22°C and 50% RH, and a breathing flow rate of 50 L/min.

Field Name	Contents
PPE Model	Surgical N95 respirator models
Sample #	Number of samples of each model tested for rigidity

Table 10. Shape change of surgical N95 respirators using a medium head form at 32°C, and ~100% RH, at 40, 50, and 60 L/min breathing flow rates.

Field Name	Contents
PPE Model	Surgical N95 respirator models
Breathing flow rate	Breathing flow rate used for testing rigidity of respirators
Sample #	Represents the sample number of each model tested