

A Field-Portable Colorimetric Method for the Measurement of Peracetic Acid Vapors: A Comparison of Glass and Plastic Impingers

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DATA DICTIONARY

Data Element	Definition
C-measured (mg/L)	Concentrations of the PAA (peracetic acid) solution determined using Chemetrics or HACH methods, in milligrams per liter
Dilution (L)	Total diluted volume, in liters of the impinger sample
V-PAA (uL)	Volume of PAA, in microliters pipetted onto the impinger inlet filter
C-calculated (mg/L)	Theoretical PAA concentration, in milligrams per liter
Tube Length (in)	Length of tygon tubing connecting the filter to the impinger inlet, in inches
% Recovery PAA	Percent Recovery of PAA, $C\text{-measured (mg/L)} / C\text{-calculated (mg/L)} * 100$
Impinger Type	What type of impinger was used – Glass – 50 mL glass impinger Horizontal – plastic impinger with a vertical inlet and horizontal outlet Vertical – plastic impinger with vertical inlet and outlet ports 3D – 3D printed impinger nozzle Front impinger – the first impinger in a series Back impinger – the second impinger in a series Glass – Front – the first impinger in a series, using a glass impinger Glass – Back – the second impinger in a series, using a glass impinger Horizontal – Front – the first impinger in a series, using a plastic impinger with a vertical inlet and horizontal outlet Horizontal – Back – the second impinger in a series, using a plastic impinger with a vertical inlet and horizontal outlet
Measurement Method	Chemetrics or HACH method used to determine PAA concentration
PAA (weight %)	Weight percent of PAA
HP (weight %)	Weight percent of hydrogen peroxide