

Method

References: Developed by CHEMetrics, Inc.

Because it is a strong disinfectant, peracetic acid is an excellent sanitizing agent for the food and beverage industry. Peracetic acid is used to disinfect equipment, pasteurizers, tanks, pipelines, evaporators, fillers, and contact surfaces in food processing plants. It is especially effective in eliminating the osmotolerant microbes (e.g. the yeast *Zygosaccharomyces bailii*) in beverage plants producing high-sugar products. The pulp and paper industry uses peracetic acid as a delignification and bleaching agent.

In the Peracetic Acid DDPD test method, the sample is treated with an excess of potassium iodide. Peracetic acid oxidizes the iodide to iodine. The iodine then oxidizes DDPD, a methyl-substituted form of DPD (N, N-diethyl-p-phenylenediamine) to form a purple-colored species that is directly proportional to the peracetic acid concentration in the sample. Results are expressed as ppm (mg/L) peracetic acid.

Various oxidizing agents such as halogens, ozone, ferric ions, and cupric ions will produce high test results. Hydrogen peroxide does not interfere.



Instrumental Kits

V-2000 Multi-Analyte Photometer

(See page 8 for instrumental features)

Range: 0.40-4.00 ppm
Method: DDPD

	Cat#
Vacu-vials Kit	K-7903

Kit comes in a cardboard box and contains everything needed to perform 30 tests: thirty ampoules, Activator Solution, 25 mL sample cup, ampoule blank, instructions, calibration table, and MSDS.

Vacu-vials Kits require the use of the V-2000 Photometer or a spectrophotometer capable of accepting a 13 mm diameter round cell. Instrument sold separately.

V-1000 Multi-Analyte Photometer

(See page 10 for instrumental features)

Range: 0.40-4.00 ppm
Method: DDPD

	Cat#
VVR Module	V-7903

Vacu-vials Refill, 30 ampoules	R-7903
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Activator Solution Pack, six 10 mL bottles, Shelf-life 2 years	A-7900 ¹
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VVR Filter, Shelf-life 2 years	F-7903
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Module comes in a cardboard box and contains everything needed to perform 30 tests: Refill, VVR Filter, Activator Solution, 25 mL sample cup, instructions, and MSDS.

VVR Modules require the use of the V-1000 Photometer. Instrument sold separately.

SAM Single-Analyte Photometer

(See page 10 for instrumental features)

Range: 0.50-4.00 ppm
Method: DDPD

	Cat#
SAM Kit	I-2010

Vacu-vials Refill, 30 ampoules	R-7903
Activator Solution Pack, six 10 mL bottles, Shelf-life 2 years	A-7900 ¹

Kit comes in a plastic case and contains everything needed to perform 30 tests: SAM Photometer, Refill, Activator Solution, 25 mL sample cup, 9V battery, ampoule blank, test tube, light shield, instructions, and MSDS.

¹The accessory pack supplies enough solution to perform at least 200 tests.



Visual Kits

Range: 0-1 & 1-5 ppm
MDL: 0.05 ppm / Method: DDPD

	Cat#
CHEMets Kit	K-7905

CHEMets Refill, 30 ampoules	R-7905
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Activator Solution Pack, six 10 mL bottles, Shelf-life 2 years	A-7900 ¹
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Low Range Comparator, Shelf-life 2 years: 0, 0.1, 0.2, 0.3, 0.4, 0.6, 0.8, 1.0 ppm	C-7901
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High Range Comparator, Shelf-life 2 years: 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0 ppm	C-7905
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Kit comes in a plastic case and contains everything needed to perform 30 tests: Refill, Low and High Range Comparators, Activator Solution, 25 mL sample cup, instructions, and MSDS.

Kit Components common to Peracetic Acid

Description	Cat#
Sample Cup Pack, 25 mL (6 ea)	A-0013
Ampoule Blank Pack (5 ea)	A-0023
Test Tube Pack (10 ea)	A-0025
VVR Zero Ampoule Pack (5 ea)	A-0128
VVR Zero Test Tube Pack (5 ea)	A-0129
SAM Light Shield (1 ea)	A-0138