

## Method

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. The pulp and paper industry uses peracetic acid as a delignification and bleaching agent. Peracetic Acid is also coming into use as a biocide in wastewater applications.

### The DPD Method

**References:** USEPA Methods for Chemical Analysis of Water and Wastes, Method 330.5 (1983) APHA Standard Methods, 22<sup>nd</sup> ed., Method 4500-Cl G - 2000.

In the Peracetic Acid DPD test method, the sample is treated with an excess of potassium iodide. Peracetic acid oxidizes iodide to iodine. The iodine then oxidizes the DPD (N, N-diethyl-p-phenylenediamine) to form a pink-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 if present at levels comparable to the peracetic acid levels.

## Instrumental Kits

### Multi-Analyte Photometers

V-2000 / V-3000 Series

(See page 14 for instrumental features)

Range: 0-5.00 ppm

Method: DPD

	Cat#
Vacu-vials Kit	K-7913

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

*Vacu-vials Kits require the use of a CHEMetrics Direct-Readout Photometer (photometers sold separately) or a spectrophotometer capable of accepting a 13 mm diameter round cell. See page 14 for details.*

### SAM Single-Analyte Photometer

(See page 17 for instrumental features)

Range: 0-5.00 ppm

Method: DPD

	Cat#
SAM Kit	I-2020

Vacu-vials Kit, 30 ampoules, Activator Solution, 25 mL sample cup, ampoule blank and instructions.

K-7913

SAM Kit comes in a plastic case and contains everything needed to perform 30 tests: Vacu-vials Kit, SAM Photometer, light shield, 4 AAA batteries, screwdriver, and instructions.

### Kit Components common to Peracetic Acid

Description	Cat#
Sample Cup Pack, 25 mL (6 ea)	A-0013
Ampoule Blank Pack (5 ea)	A-0023

<sup>1</sup>The accessory pack supplies enough solution to perform at least 200 tests.

*Instructions and MSDS (s) are posted on our website.*

*If no shelf-life is listed for a product, then the shelf-life is at least 2 years.*



## Visual Kit

Range: 0-1 & 1-5 ppm

MDL: 0.05 ppm / Method: DPD

	Cat#
CHEMets Kit	K-7904
CHEMets Refill, 30 ampoules	R-7904
Activator Solution Pack, six 10 mL bottles	A-7900 <sup>1</sup>
Low Range Comparator 0, 0.1, 0.2, 0.3, 0.4, 0.6, 0.8, 1.0 ppm	C-7902
High Range Comparator 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0 ppm	C-7904

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 and instructions.