

## 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: APHA Standard Methods Online, Method 4500-PAA - 2019.

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, and cupric ions will produce high test results. Hydrogen peroxide does not interfere if present at levels comparable to the peracetic acid levels.



## Visual Kit

Range: 0-1 & 0-5 ppm MDL: 0.05 ppm / Method: DPD	
<b>CHEMets Kit</b>	<b>Cat# K-7904</b>
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 0, 1.0, 1.5, 2.0, 2.6, 3.2, 3.8, 4.4, 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.	

Range: 0-30 & 0-150 ppm MDL: 3 ppm / Method: DPD	
<b>VACUettes Kit</b>	<b>Cat# K-7904D</b>
VACUettes Refill, 30 ampoules	R-7904D
Activator Solution Pack, six 10 mL bottles	A-7900
Low Range Comparator 0, 3, 6, 10, 15, 20, 25, 30 ppm	C-7902D
High Range Comparator 0, 30, 50, 70, 85, 100, 115, 130, 150 ppm	C-7904D
Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Activator Solution, dilutor snapper cup, micro test tube, and instructions.	

Range: 0-70 & 0-300 ppm MDL: 7 ppm / Method: DPD	
<b>VACUettes Kit</b>	<b>Cat# K-7904A</b>
VACUettes Refill, 30 ampoules	R-7904A
Activator Solution Pack, six 10 mL bottles	A-7900
Low Range Comparator 0, 7, 15, 25, 35, 45, 55, 70 ppm	C-7902A
High Range Comparator 0, 70, 90, 130, 165, 200, 230, 265, 300 ppm	C-7904A
Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Activator Solution, dilutor snapper cup, micro test tube, and instructions.	

Range: 0-130 & 0-600 ppm MDL: 15 ppm / Method: DPD	
<b>VACUettes Kit</b>	<b>Cat# K-7904B</b>
VACUettes Refill, 30 ampoules	R-7904B
Activator Solution Pack, six 10 mL bottles	A-7900
Low Range Comparator 0, 15, 30, 45, 65, 85, 105, 130 ppm	C-7902B
High Range Comparator 0, 130, 180, 250, 315, 380, 450, 515, 600 ppm	C-7904B
Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Activator Solution, dilutor snapper cup, micro test tube, and instructions.	

Range: 0-1200 & 0-6000 ppm MDL: 120 ppm / Method: DPD	
<b>VACUettes Kit</b>	<b>Cat# K-7904C</b>
VACUettes Refill, 30 ampoules	R-7904C
Activator Solution Pack, six 10 mL bottles	A-7900
Low Range Comparator 0, 120, 240, 360, 540, 720, 960, 1200 ppm	C-7902C
High Range Comparator 0, 1200, 1800, 2400, 3100, 3800, 4400, 5200, 6000 ppm	C-7904C
Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Activator Solution, dilutor snapper cup, micro test tube, and instructions.	

## Instrumental Kits

### Multi-Analyte Photometers V-2000 / V-3000 (See page 14 for instrumental features)

Range: 0-5.00 ppm  
Method: DPD

<b>Vacu-vials Kit</b>	<b>Cat# K-7913</b>
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 16 for instrumental features)

Range: 0-5.00 ppm  
Method: DPD

<b>SAM Kit</b>	<b>Cat# I-2020</b>
Vacu-vials Kit, 30 ampoules, Activator Solution, 25 mL sample cup, ampoule blank and instructions.	
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.	

### Components and Accessories

Description	Cat#
Sample Cup Pack, 25 mL (6 ea)	A-0013
Micro Test Tube Pack (10 ea)	A-0015
Dilutor Snapper Cup Pack (6 ea)	A-0018
Ampoule Blank Pack (5 ea)	A-0023
* Sample Zeroing Accessory Pack	A-0025
Peracetic Acid Standard (1 ppm)	A-7925

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

\* For use when testing colored or turbid samples. See page 13 for details.

Instructions and SDSs are posted on our website.

If no shelf life is listed for a product, then the shelf life is at least 1 year.