

Peroxide CHEMets®

0 - 0.50 ppm

Test Procedure

1. Fill the sample cup to the 25 mL mark with the sample (fig 1).
2. Add 5 drops of A-2500 Activator Solution and 5 drops of A-5500 Activator Solution (fig 2). Stir briefly with the tip of the ampoule to mix the contents of the sample cup. Wait **6 minutes**.
3. Place the CHEMet ampoule in the sample cup. Snap the tip by pressing the ampoule against the side of the cup. The ampoule will fill leaving a small bubble to facilitate mixing (fig 3).
4. Mix the contents of the ampoule by inverting it several times, allowing the bubble to travel from end to end each time. Wipe all liquid from the exterior of the ampoule. Wait **1 minute** for color development.
5. Place the CHEMet ampoule, flat end downward into the center tube of the comparator. Direct the top of the comparator up toward a source of bright light while viewing from the bottom. Rotate the comparator until the color standard below the CHEMet ampoule shows the closest match (fig 4). If the color of the CHEMet ampoule is between two color standards, a concentration estimate can be made.

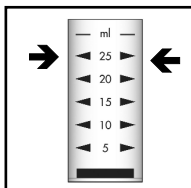


Figure 1

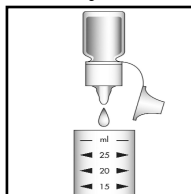


Figure 2

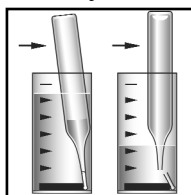


Figure 3

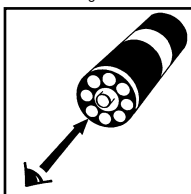


Figure 4

Test Method

The Peroxide CHEMets®¹ test method employs the DDPD chemistry.² The sample is treated with an excess of potassium iodide. In the presence of a molybdate catalyst, hydrogen peroxide 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 in direct proportion to the hydrogen peroxide concentration. Results are expressed in ppm (mg/Liter) H₂O₂.

Various oxidizing agents such as halogens and ozone will produce high test results.

1. CHEMets is a registered trademark of CHEMetrics, Inc. U.S. Patent No. 3,634,038
2. The DDPD methodology was developed by CHEMetrics, Inc.

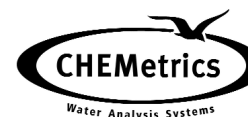
Safety Information

Read MSDS before performing this test procedure. Wear safety glasses.

Reorder Information

Cat. No.

<i>Test Kit, complete</i>	<i>K-5504</i>
<i>Refill, 30 CHEMet ampoules</i>	<i>R-5504</i>
<i>Activator Solution, six 10 mL bottles</i>	<i>A-2500</i>
<i>Activator Solution, six 10 mL bottles</i>	<i>A-5500</i>
<i>Sample Cup, 25 mL, package of six</i>	<i>A-0013</i>
<i>Comparator, 0-0.5 ppm</i>	<i>C-5504</i>



CHEMetrics, Inc., 4295 Catlett Road, Calverton, VA 20138-0214 U.S.A.
 Phone: (800) 356-3072; Fax: (540) 788-4856; E-Mail: orders@chemetrics.com
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