

Formaldehyde CHEMets® Kit

K-4605/R-4815: 0 - 1 & 1 - 10 ppm

This test method is somewhat temperature dependent. For best results, samples should be less than 40°C.

Activator Solution Preparation

Fill the S-4201 Activator Solution bottle to the shoulder with distilled water or add 15 mL of distilled water. Add 10 drops of S-4202 Activator Solution. Cap the bottle and shake it until the chemical dissolves completely. Label the bottle with a **6 month** expiration date.

Test Procedure

1. Fill the sample cup to the 20 mL mark with the sample to be tested (fig. 1).
2. Add 6 drops of S-4201 Activator Solution (fig. 2). Stir to mix the contents of the cup.
3. Add 4 drops of S-4202 Activator Solution (fig. 2). Stir to mix the contents of the cup.
4. Place the CHEMet ampoule, tip first, into the sample cup. Snap the tip. The ampoule will fill leaving a bubble for mixing (fig. 3).
5. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.
6. Dry the ampoule. Obtain a test result **12 minutes** after snapping the tip.

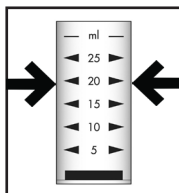


Figure 1

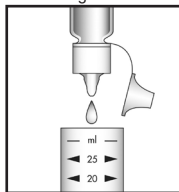


Figure 2

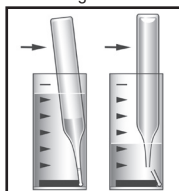


Figure 3

7. Obtain a test result using the appropriate comparator.

a. Low Range Comparator (fig. 4):

Place the ampoule, flat end first, into the comparator. Hold the comparator up toward a source of light and view from the bottom. Rotate the comparator until the best color match is found.



Figure 4

b. High Range Comparator (fig. 5):

Place the ampoule between the color standards until the best color match is found.

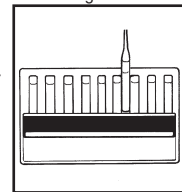


Figure 5

Test Method

The Formaldehyde CHEMets®¹ test method employs the Purpald®² chemistry. In a highly alkaline solution, and in conjunction with an oxidizing agent, formaldehyde reacts with Purpald to form a purple colored complex in direct proportion to the formaldehyde concentration. Certain aldehydes and alcohols will cause high test results.

1. CHEMets is a registered trademark of AquaPhoenix Scientific, LLC U.S. Patent No. 3,634,038

2. Purpald is a registered trademark of Aldrich Chemical Company. The reagent methodology was developed by Aldrich Chemical Company.

Safety Information

Read SDS before performing this test procedure. Wear safety glasses and protective gloves.

