

Sulfide HR CHEMets® Kit

K-9520C/R-9510 & A-0171:

1000 - 10,000 ppm

Sample Temperature

Sample temperatures that deviate significantly from 20°C (68°F) may introduce test result bias.

Test Procedure

1. Place a pipette tip firmly onto the end of the MiniPet®⁴ (fig. 1).

NOTE: Use a fresh pipette tip for each test.

2. Depress the plunger on the minipet.
3. Immerse the tip in the sample to be tested and release the plunger. A portion of the sample will be drawn into the tip (fig. 2).

NOTE: Do not touch the side or bottom of the sample container with the tip during sampling.

4. Hold the minipet over the sample cup, and depress the plunger to dispense sample (fig. 3).
5. Dilute the contents of the sample cup to the **25 ml mark with distilled water** (fig. 4).

6. Add 3 drops of S-9500 Activator Solution (fig. 5). Stir to mix the contents of the cups.
7. **Immediately** place the CHEMet ampoule, tip first, into the sample cup. Snap the tip. The ampoule will fill leaving a bubble for mixing (fig. 6).

8. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.

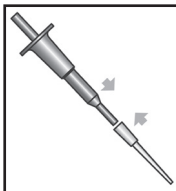


Figure 1

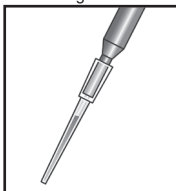


Figure 2

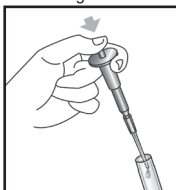


Figure 3

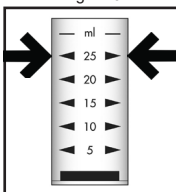


Figure 4

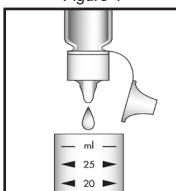


Figure 5

9. Dry the ampoule. Obtain a test result **5 minutes** after snapping the tip.
10. Obtain a test result by placing the ampoule between the color standards until the best color match is found (fig. 7).

NOTE: Use the 1000 - 10,000 ppm concentration scale on the comparator label.

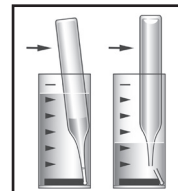


Figure 6

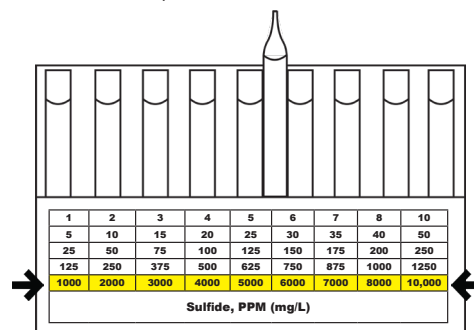


Figure 7

Test Method

The Sulfide CHEMets®¹ test kit employs the methylene blue chemistry.^{2,3} In an acidic solution, sulfide reacts with N,N-dimethyl-p-phenylenediamine and ferric chloride to produce methylene blue. The resulting blue color is directly proportional to the sulfide concentration.

Strong reducing agents, including high levels of sulfide, will cause low test results. Sulfide is very volatile, especially when the sample is acidified. It is essential to analyze the sample as quickly as possible.

1. CHEMets is a registered trademark of AquaPhoenix Scientific, LLC U.S. Patent No. 3,634,038
2. APHA Standard Methods, 23rd ed., Method 4500-S₂-D - 2000
3. EPA Methods for Chemical Analysis of Water and Wastes, Method 330.5 (1983)
4. MiniPet is a registered trademark of Tricontinent Scientific, Inc.

Safety Information

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

Aug. 25, Rev. 3