

Sulfide CHEMets® Kit

K-9510/R-9510: 0 - 1 & 1 - 10 ppm

Sample Temperature

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

Test Procedure

1. Fill the sample cup to the 25 mL mark with the sample to be tested (fig. 1).
2. Add 3 drops of S-9500 Activator Solution (fig. 2). Stir to mix the contents of the cup.
3. Immediately place the CHEMet ampoule, tip first, into the sample cup. Snap the tip. The ampoule will fill leaving a bubble for mixing (fig. 3).
4. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.
5. Dry the ampoule. Obtain a test result **5 minutes** after snapping the tip.
6. 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.

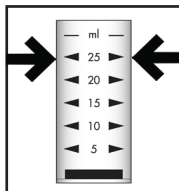


Figure 1

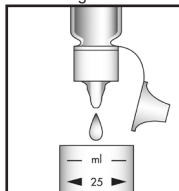


Figure 2

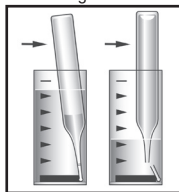


Figure 3



Figure 4

b.High Range Comparator (fig. 5):

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

NOTE: Use the 1 - 10 ppm concentration scale on the comparator label.

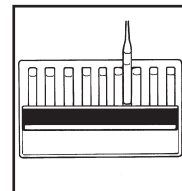


Figure 5

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 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 376.2 (1983)

Safety Information

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

