Molybdate CHEMets® Kit

K-6701/R-6702: 0 - 7 ppm Mo
K-6702/R-6702: 2 - 24 ppm Mo
K-6720/R-6720: 20 - 200 ppm Mo

Test Procedure

1. Fill the sample cup to the 25 mL mark with the sample to be tested (fig 1).
2. Place the CHEMet ampoule, tip first, into the sample cup. Snap the tip. The ampoule will fill leaving a bubble for mixing (fig 2).
3. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.
   NOTE: For R-6720 Only: Invert the ampoule 20 - 30 times until a uniform color is obtained.
4. Dry the ampoule. Obtain a test result **1 minute** after snapping the tip.
5. Obtain a test result using the comparator.
   a. **For K-6701 (fig 3):** 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.
   b. **For K-6702 & K-6720 (fig 4):** Place the ampoule between the color standards until the best color match is found.

NOTE: To convert to ppm molybdate (MoO_4=), multiply test result by 1.67.

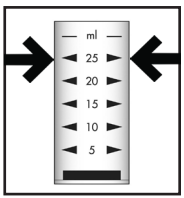

Figure 1

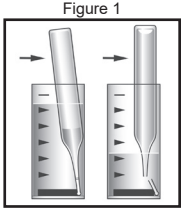
Figure 2

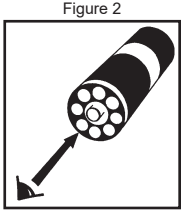
Figure 3

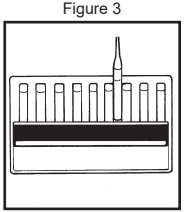
Figure 4

Test Method

The Molybdate CHEMets®[1] test method employs the catechol[2,3] chemistry. In a mildly reducing alkaline solution, catechol reacts with hexavalent molybdenum to form a yellow-orange colored chelate in direct proportion to the hexavalent molybdenum concentration.

1. CHEMets is a registered trademark of AquaPhoenix Scientific, LLC U.S. Patent No. 3,634,038
2. G.P. Haight and V. Paragamian, Anal. Chem., 32,642 (1960)
3. H. Onishi and E. B. Sandell, Photometric Determination of Trace Metals. 4th ed., Part I, p. 295 (1978)

Safety Information

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

CHEMetrics®
By AquaPhoenix Scientific

Feb. 24, Rev. 8