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 and wait **1 minute** for color development.
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.

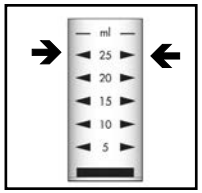

Figure 1

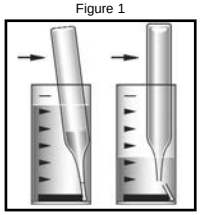
Figure 2

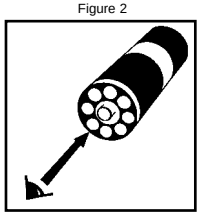
Figure 3

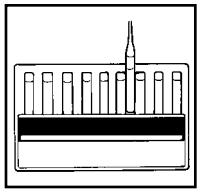
Figure 4

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 CHEMetrics, Inc. 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 (available at www.chemetrics.com) before performing this test procedure. Wear safety glasses and protective gloves.

Visit www.chemetrics.com to view product demonstration videos.
Always follow the test procedure above to perform a test.

www.chemetrics.com
4295 Catlett Road, Midland, VA 22728 U.S.A.
Phone: (800) 356-3072; Fax: (540) 788-4856
E-Mail: orders@chemetrics.com

Feb. 18, Rev. 5

CHEMetrics
Simplicity in Water Analysis