

Molybdate CHEMets[®]

20 - 200 ppm

Safety Information

Read MSDS before performing this test procedure. Wear safety glasses.

Test Procedure

1. Fill the sample cup to the 25 mL mark with the sample (fig 1).
2. Place the CHEMet ampoule in the sample cup. Snap the tip by pressing the ampoule against the side of the cup. The ampoule will fill leaving a small bubble to facilitate mixing (fig 2).
3. Mix the contents of the ampoule by inverting it, allowing the bubble to travel from end to end each time, until a uniform color is obtained (20-30 times). Wipe all liquid from the exterior of the ampoule. Wait **1 minute** for color development.
4. Hold the comparator in a nearly horizontal position while standing directly beneath a bright source of light. Place the CHEMet ampoule between the color standards moving it from left to right along the comparator until the best color match is found (fig 3). If the color of the CHEMet ampoule is between two color standards, a concentration estimate can be made.

NOTE: Test results are expressed in ppm (mg/L) molybdenum (Mo). To convert test results to ppm (mg/L) molybdate (MoO_4^-), multiply test results by 1.67.

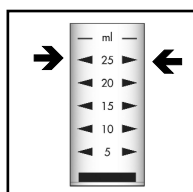


Figure 1

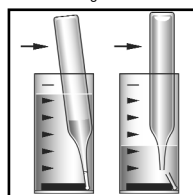


Figure 2

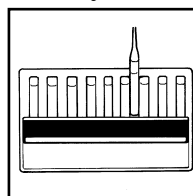


Figure 3

Test Method

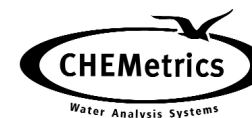
The Molybdate CHEMets¹ test method employs the catechol^{2,3} chemistry. In a mildly reducing alkaline solution, catechol reacts with hexavalent molybdenum to form a yellow-orange colored chelate in direct proportion to the hexavalent molybdenum concentration. Test results are expressed in ppm (mg/Liter) molybdenum (Mo).

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)

Reorder Information

Cat. No.

Test Kit, complete K-6720
Refill, 30 CHEMet ampoules R-6720
Sample Cup, 25 mL, package of six A-0013
Comparator, 20-200 ppm C-6720



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