

Method

Sulfides are naturally present in ground waters as a result of leaching from sulfur-containing mineral deposits. Surface waters do not usually contain high sulfide concentrations. Sulfides result from the decomposition of organic matter, from bacterial sulfate reduction under anaerobic conditions and from various chemical processes.

The Methylene Blue Method

References: USEPA Methods for Chemical Analysis of Water and Wastes, Method 376.2 (1983). APHA Standard Methods, 21st ed., Method 4500-S²-D (2005).

CHEMetrics test kits measure total acid soluble sulfides (including hydrogen sulfide) and employ the methylene blue methodology. Sulfides react with dimethyl-p-phenylenediamine in the presence of ferric chloride to produce methylene blue. Results are expressed as ppm (mg/L) S.



Visual Kits

Range: 0-1 & 1-10 ppm
MDL: 0.05 ppm / Method: Methylene Blue

	Cat#
CHEMets Kit	K-9510
CHEMets Refill, 30 ampoules	R-9510
Activator Solution Pack, six 10 mL bottles	A-9500 ¹
Low Range Comparator 0, 0.1, 0.2, 0.3, 0.4, 0.6, 0.8, 1.0 ppm	C-9501
High Range Comparator 1, 2, 3, 4, 5, 6, 7, 8, 10 ppm	C-9510
Kit comes in a plastic case and contains everything needed to perform 30 tests: Refill, Low and High Range Comparators, Activator Solution, 25 mL sample cup, instructions, and MSDS.	

Range: 0-30 & 30-300 ppm
MDL: 5 ppm / Method: Methylene Blue

	Cat#
VACUettes Kit	K-9510D
VACUettes Refill, 30 ampoules	R-9510D
Activator Solution Pack, six 10 mL bottles	A-9500 ¹
Low Range Comparator 0, 5, 7.5, 10, 15, 20, 25, 30 ppm	C-9501D
High Range Comparator 30, 60, 90, 120, 150, 175, 200, 250, 300 ppm	C-9510D
Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Activator Solution, dilutor snapper cup, sample cup top, micro test tube, instructions, and MSDS.	

Range: 0-60 & 60-600 ppm
MDL: 10 ppm / Method: Methylene Blue

	Cat#
VACUettes Kit	K-9510A
VACUettes Refill, 30 ampoules	R-9510A
Activator Solution Pack, six 10 mL bottles	A-9500 ¹
Low Range Comparator 0, 10, 15, 20, 30, 40, 50, 60 ppm	C-9501A
High Range Comparator 60, 120, 180, 240, 300, 350, 400, 500, 600 ppm	C-9510A
Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Activator Solution, dilutor snapper cup, sample cup top, micro test tube, instructions, and MSDS.	

 Instrumental Kits

Range: 0-120 & 120-1200 ppm MDL: 20 ppm / Method: Methylene Blue	
VACUettes Kit	Cat# K-9510B
VACUettes Refill, 30 ampoules	R-9510B
Activator Solution Pack, six 10 mL bottles	A-9500 ¹
Low Range Comparator 0, 20, 30, 40, 60, 80, 100, 120 ppm	C-9501B
High Range Comparator 120, 240, 360, 480, 600, 700, 800, 1000, 1200 ppm	C-9510B
Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Activator Solution, dilutor snapper cup, sample cup top, micro test tube, instructions, and MSDS.	

Range: 0-1200 & 1200-12,000 ppm MDL: 200 ppm / Method: Methylene Blue	
VACUettes Kit	Cat# K-9510C
VACUettes Refill, 30 ampoules	R-9510C
Activator Solution Pack, six 10 mL bottles	A-9500 ¹
Low Range Comparator 0, 200, 300, 400, 600, 800, 1000, 1200 ppm	C-9501C
High Range Comparator 1200, 2400, 3600, 4800, 6000, 7000, 8000, 10,000, 12,000 ppm	C-9510C
Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Activator Solution, dilutor snapper cup, sample cup top, micro test tube, instructions, and MSDS.	

V-2000 Multi-Analyte Photometer
(See page 14 for instrumental features)

Range: V-2000: 0.20-3.00 ppm / Spec: 0.10-1.00 ppm Method: Methylene Blue	
Vacu-vials Kit	Cat# K-9503
Kit comes in a cardboard box and contains everything needed to perform 30 tests: thirty ampoules, Activator Solution, 25 mL sample cup, ampoule blank, instructions, and MSDS.	

Range: 0.60-6.00 ppm Method: Methylene Blue	
Vacu-vials Kit	Cat# K-9523
Kit comes in a cardboard box and contains everything needed to perform 30 tests: thirty ampoules, Activator Solution, 25 mL sample cup, ampoule blank, instructions, and MSDS.	

Vacu-vials Kits require the use of the V-2000 Photometer or a spectrophotometer capable of accepting a 13 mm diameter round cell. Instrument sold separately.

Kit Components common to Sulfide	
Description	Cat#
Sample Cup Pack, 25 mL (6 ea)	A-0013
Sample Cup Top Pack for 25 mL Cup (6 ea)	A-0014
Micro Test Tube Pack (10 ea)	A-0015
Dilutor Snapper Cup Pack (6 ea)	A-0018
Ampoule Blank Pack (5 ea)	A-0023

¹The accessory pack supplies enough solution to perform at least 200 tests.

*Instructions and MSDS(s) are posted on our website.
If no shelf-life is listed for a product, then the shelf-life is at least 2 years.*

