## Method

References: USEPA Methods for Chemical Analysis of Water and Wastes, Method 376.2 (1983). APHA Standard Methods, 21st ed., Method 4500-S<sup>2-</sup>D (2005).

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.

CHEMetrics test kits measure total acid soluble sulfides 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.





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-95001		
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 terms. Refill, Low and High Range Comparators, Activator Solution, 25 mL sample of 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 <sup>1</sup>	
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, 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-95001		
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 3 (except distilled water): Refill, Low and High Range Comparators, Activa Solution, dilutor snapper cup, micro test tube, instructions, and MSDS.			

## Range: 0-120 & 120-1200 ppm MDL: 20 ppm / Method: Methylene Blue Cat# VACUettes Kit VACUettes Refill, 30 ampoules Activator Solution Pack, six 10 mL bottles Activator Solution Pack, six 10 mL b

(except distilled water): Refill, Low and High Range Comparators, Activator Solution, dilutor snapper cup, 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-95001		
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 test (except distilled water): Refill, Low and High Range Comparators, Activator Solution, dilutor snapper cup, micro test tube, instructions, and MSDS.			



## Instrumental Kits

## V-2000 Multi-Analyte Photometer

(See page 12 for instrumental features)

Range: V-2000: 0.20-3.00 ppm / Spec: 0.10-1.00 ppm Method: Methylene Blue

Vacu-vials Kit 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, calibration table, and MSDS.

Range: 0.60-6.00 ppm Method: Methylene Blue

Cat#
Vacu-vials Kit 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, calibration table, 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) Micro Test Tube Pack (10 ea) Dilutor Snapper Cup Pack (6 ea) Ampoule Blank Pack (5 ea)	A-0013 A-0015 A-0018 A-0023

<sup>&</sup>lt;sup>1</sup>The accessory pack supplies enough solution to perform at least 200 tests.

Instructions are posted on our website.

If no shelf-life is listed for a product, then the shelf-life is at least 2 years.

