

Method

References: APHA Standard Methods, 20th ed., pp. 3-66, Method 3500-Cr B (1998). ASTM D 1687-92 (1996), Chromium in Water, Test Method A.

Hexavalent chromium salts are used in numerous industrial processes. They are also used extensively as corrosion inhibitors in open and closed cooling water systems.

With the chromate test method, hexavalent chromium reacts with diphenylcarbazide under acid conditions to form a red-violet color. Results are quantified photometrically or by visual comparison with standards that are calibrated in ppm (mg/L) CrO₄.



Visual Kits

Range: 0-1 & 1-10 ppm MDL: 0.05 ppm / Method: Diphenylcarbazide	
	Cat#
CHEMets Kit	K-2810
CHEMets Refill, 30 ampoules	R-2810
Acidifier Solution Pack, six 10 mL bottles, Shelf-life 2 years	A-2800'
Low Range Comparator, Shelf-life 2 years: 0, 0.1, 0.2, 0.3, 0.4, 0.6, 0.8, 1.0 ppm	C-2801
High Range Comparator, Shelf-life 2 years: 1, 2, 3, 4, 5, 6, 7, 8, 10 ppm	C-2810
Kit comes in a plastic case and contains everything needed to perform 30 tests: Refill, Low and High Range Comparators, Acidifier Solution, 25 mL sample cup, instructions, and MSDS.	

Range: 0-25 & 25-250 ppm MDL: 2.5 ppm / Method: Diphenylcarbazide	
	Cat#
VACUettes Kit	K-2810D
VACUettes Refill, 30 ampoules	R-2810D
Acidifier Solution Pack, six 10 mL bottles, Shelf-life 2 years	A-2800'
Low Range Comparator, Shelf-life 2 years: 0, 2.5, 5, 7.5, 10, 15, 20, 25 ppm	C-2801D
High Range Comparator, Shelf-life 2 years: 25, 50, 75, 100, 125, 150, 175, 200, 250 ppm	C-2810D
Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Acidifier Solution, dilutor snapper cup, micro test tube, instructions, and MSDS.	

Range: 0-50 & 50-500 ppm MDL: 5 ppm / Method: Diphenylcarbazide	
	Cat#
VACUettes Kit	K-2810A
VACUettes Refill, 30 ampoules	R-2810A
Acidifier Solution Pack, six 10 mL bottles, Shelf-life 2 years	A-2800'
Low Range Comparator, Shelf-life 2 years: 0, 5, 10, 15, 20, 30, 40, 50 ppm	C-2801A
High Range Comparator, Shelf-life 2 years: 50, 100, 150, 200, 250, 300, 350, 400, 500 ppm	C-2810A
Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Acidifier Solution, dilutor snapper cup, micro test tube, instructions, and MSDS.	

Range: 0-100 & 100-1000 ppm MDL: 10 ppm / Method: Diphenylcarbazide	
	Cat#
VACUettes Kit	K-2810B
VACUettes Refill, 30 ampoules	R-2810B
Acidifier Solution Pack, six 10 mL bottles, Shelf-life 2 years	A-2800'
Low Range Comparator, Shelf-life 2 years: 0, 10, 20, 30, 40, 60, 80, 100 ppm	C-2801B
High Range Comparator, Shelf-life 2 years: 100, 200, 300, 400, 500, 600, 700, 800, 1000 ppm	C-2810B
Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Acidifier Solution, dilutor snapper cup, micro test tube, instructions, and MSDS.	

Range: 0-1000 & 1000-10,000 ppm MDL: 100 ppm / Method: Diphenylcarbazide	
	Cat#
VACUettes Kit	K-2810C
VACUettes Refill, 30 ampoules	R-2810C
Acidifier Solution Pack, six 10 mL bottles, Shelf-life 2 years	A-2800'
Low Range Comparator, Shelf-life 2 years: 0, 100, 200, 300, 400, 600, 800, 1000 ppm	C-2801C
High Range Comparator, Shelf-life 2 years: 1000, 2000, 3000, 4000, 5000, 6000, 7000, 8000, 10,000 ppm	C-2810C
Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Acidifier Solution, dilutor snapper cup, micro test tube, instructions, and MSDS.	

 Instrumental Kits

V-2000 Multi-Analyte Photometer

(See page 8 for instrumental features)

Range: 0.20-3.50 ppm
Method: Diphenylcarbazide

	Cat#
Vacu-vials Kit	K-2803
Kit comes in a cardboard box and contains everything needed to perform 30 tests: thirty ampoules, Acidifier Solution, 25 mL sample cup, ampoule blank, instructions, calibration table, and MSDS.	

Range: 0.70-13.00 ppm
Method: Diphenylcarbazide

	Cat#
Vacu-vials Kit	K-2823
Kit comes in a cardboard box and contains everything needed to perform 30 tests: thirty ampoules, Acidifier 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.

V-1000 Multi-Analyte Photometer

(See page 10 for instrumental features)

Range: 0.20-3.50 ppm
Method: Diphenylcarbazide

	Cat#
VVR Module	V-2803
Vacu-vials Refill, 30 ampoules	R-2803
Acidifier Solution Pack, six 10 mL bottles, Shelf-life 2 years	A-2800 ¹
VVR Filter, Shelf-life 2 years	F-2803
Module comes in a cardboard box and contains everything needed to perform 30 tests: Refill, VVR Filter, Acidifier Solution, 25 mL sample cup, instructions, and MSDS.	

Range: 0.70-7.00 ppm
Method: Diphenylcarbazide

	Cat#
VVR Module	V-2823
Vacu-vials Refill, 30 ampoules	R-2823
Acidifier Solution Pack, six 10 mL bottles, Shelf-life 2 years	A-2800 ¹
VVR Filter, Shelf-life 2 years	F-2823
Module comes in a cardboard box and contains everything needed to perform 30 tests: Refill, VVR Filter, Acidifier Solution, 25 mL sample cup, instructions, and MSDS.	

VVR Modules require the use of the V-1000 Photometer. Instrument sold separately.

Kit Components common to Chromate

Description	Cat#
Sample Cup Pack, 25 mL (6 ea)	A-0013
Micro Test Tube Pack (10 ea)	A-0015
Dilutor Snapper Cup Pack (6 ea)	A-0018
Ampoule Blank Pack (5 ea)	A-0023
VVR Zero Ampoule Pack (5 ea)	A-0128
VVR Zero Test Tube Pack (5 ea)	A-0129

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

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

