Methods

Formaldehyde, a toxic substance, is used in the following applications: metal plating baths, textile treatments, biological specimen preservatives, and disinfectants of medical equipment. Commercial formaldehyde gas is readily soluble in water.

The Purpald Method

Reference: Purpald[®] developed by Aldrich Chemical Co.

Purpald[®] is subject to fewer interferences than Shiffs' reagent or chromotropic acid procedures. A purplecolored complex is formed when Purpald in alkaline solution reacts with formaldehyde. Results are expressed as ppm (mg/L) CH₂O.

Shelf-life of the Purpald Reagent: 5 months. We recommend stocking quantities that will be used within four months.



Range: 0-1 & 1-5 ppm

	Cat#
CHEMets Kit	K-4605
CHEMets Refill, 30 ampoules, Shelf-life 5 months	R-4605
Activator Solution Pack, six 20 mL bottles	A-4201 ^{1, 2}
Activator Solution Pack, six 10 mL bottles	A-42021
Low Range Comparator 0, 0.1, 0.2, 0.3, 0.4, 0.6, 0.8, 1.0 ppm	C-4601
High Range Comparator 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0 ppm	C-4605
Kit comes in a plastic case and contains everything needed to	o perform 30

tests (except distilled water): Refill, Low and High Range Comparators, Activator Solutions, 25 mL sample cup and instructions.

Range: 0-30 & 30-150 ppm MDL: 5 ppm / Method: Purpald	
VACUettes Kit	Cat# K-4605D
VACUettes Refill, 30 ampoules, Shelf-life 5 months	R-4605D
Activator Solution Pack, six 20 mL bottles	A-4201 ^{1, 2}
Activator Solution Pack, six 10 mL bottles	A-42021
Low Range Comparator 0, 5, 7.5, 10, 15, 20, 25, 30 ppm	C-4601D
High Range Comparator 30, 45, 60, 75, 87.5, 100, 112.5, 125, 150 ppm	C-4605D
Kit comes in a plastic case and contains everything needed to perform	30 tests

(except distilled water): Refill, Low and High Range Comparators, Activator Solutions, dilutor snapper cup, sample cup top, micro test tube and instructions.

Range: 0-60 & 60-300 ppm MDL: 10 ppm / Method: Purpald

VACUettes Kit	Cat# K-4605A
VACUettes Refill, 30 ampoules, Shelf-life 5 months	R-4605A
Activator Solution Pack, six 20 mL bottles	A-4201 ^{1, 2}
Activator Solution Pack, six 10 mL bottles	A-42021
Low Range Comparator 0, 10, 15, 20, 30, 40, 50, 60 ppm	C-4601A
High Range Comparator 60, 90, 120, 150, 175, 200, 225, 250, 300 ppm	C-4605A
Kit comes in a plastic case and contains eventhing needed to perform 30	tosts

Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Low and High Range Comparators, Activator Solutions, dilutor snapper cup, sample cup top, micro test tube and instructions.

Range: 0-120 & 120-600 ppm MDL: 20 ppm / Method: Purpald

	Cat#
VACUettes Kit	K-4605B
VACUettes Refill, 30 ampoules, Shelf-life 5 months	R-4605B
Activator Solution Pack, six 20 mL bottles	A-4201 ^{1, 2}
Activator Solution Pack, six 10 mL bottles	A-42021
Low Range Comparator, 0, 20, 30, 40, 60, 80, 100, 120 ppm	C-4601B
High Range Comparator 120, 180, 240, 300, 350, 400, 450, 500, 600 ppm	C-4605B
Kit comes in a plastic case and contains everything needed to perform 30	

tests (except distilled water): Refill, Low and High Range Comparators, Activator Solutions, dilutor snapper cup, sample cup top, micro test tube and instructions.

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

² The Activator Solution, A-4201, is supplied as a dry chemical with NO expiration date. Once reconstituted, it has a limited shelf-life.



Visual Kits

Range: 0-1200 & 1200-6000 ppm MDL: 200 ppm / Method: Purpald

	Cat#
VACUettes Kit	K-4605C
VACUettes Refill, 30 ampoules, Shelf-life 5 months	R-4605C
Activator Solution Pack, six 20 mL bottles	A-4201 ^{1, 2}
Activator Solution Pack, six 10 mL bottles	A-42021
Low Range Comparator 0,200, 300, 400, 600, 800, 1000, 1200 ppm	C-4601C
High Range Comparator 1200. 1800, 2400, 3000, 3500, 4000, 4500, 5000, 6000 ppm	C-4605C
Kit comes in a plastic case and contains everything needed to perform 30 (except distilled water). Pafil Low and High Paper Comparators. Activat	

(except distilled water): Refill, Low and High Range Comparators, Activator Solutions, dilutor snapper cup, sample cup top, micro test tube and instructions.



Instrumental Kit

Multi-Analyte Photometers

V-2000 / V-3000 Series (See page 14 for instrumental features)

Range:	0-8.00 ppm	
Method:		

Vacu-vials Kit, Shelf-life 5 months

Cat# K-4203²

Kit comes in a cardboard box and contains everything needed to perform 30 tests (except distilled water): thirty ampoules, Activator Solutions, 25 mL sample cup, ampoule blank and instructions.

Vacu-vials Kits require the use of a CHEMetrics Direct-Readout Photometer (photometers sold separately) or a spectrophotometer capable of accepting a 13 mm diameter round cell. See page 14 for details.

Kit Components common to Formaldehyde	
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
Titrettor Pack (1 ea)	A-0053

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

²The Activator Solution, A-4201, is supplied as a dry chemical with NO expiration date. Once reconstituted, it has a limited shelf-life.

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.

