# Hydrazine

## Method

Hydrazine is a powerful reducing agent that is used in various chemical processes and in boiler water as an oxygen scavenger. To control corrosion, residual hydrazine typically is maintained in the 0.05 to 0.1 mg/L range. Higher levels may be used to guard against corrosion when the boiler is out of service for an extended period.

### The PDMAB Method

References: ASTM D 1385-07, Hydrazine in Water. L. C. Thomas and G. J. Chamberlin, Colorimetric Chemical Analytical Methods, 8<sup>th</sup> ed., pp. 194-195, Method I (1974).

CHEMetrics' hydrazine test kits employ the PDMAB, paradimethylaminobenzaldehyde chemistry. PDMAB in acid solution reacts with hydrazine to form a yellow product. Results are expressed as ppb ( $\mu g/L$ ) or ppm (mg/L)  $N_2H_4$ .

Range: 0-12.5 ppm MDL: 0.25 ppm / Method: PDMAB	
VACUettes Kit	Cat# K-5005D
VACUettes Refill, 30 ampoules	R-5005D
Comparator 0, 0.25, 0.75, 1.25, 1.75, 2.5, 7.5, 12.5 ppm	C-5005D
Kit comes in a plastic case and contains everything needed tests (except distilled water): Refill, Comparator, dilutor snatest tube and instructions.	

Range: 0-25 ppm MDL: 0.5 ppm / Method: PDMAB	
VACUettes Kit	Cat# K-5005A
VACUettes Refill, 30 ampoules	R-5005A
Comparator 0, 0.5, 1.5, 2.5, 3.5, 5, 15, 25 ppm	C-5005A
Kit comes in a plastic case and contains everything not tests (except distilled water): Refill, Comparator, diluitest tube and instructions.	



Range: 0-50 ppb MDL: 2 ppb / Method: PDMAB	
ULR CHEMets Kit	Cat# K-5011
ULR CHEMets Refill, 30 ampoules	R-5011
Comparator 0, 2, 5, 10, 20, 30, 40, 50 ppb	C-5011
Kit comes in a cardboard box and contains everything needed to perform 30 tests: Refill, Comparator, 25 mL sample cup and instructions.	

Range: 0-0.5 ppm MDL: 0.005 ppm / Method: PDMAB	
CHEMets Kit	Cat# K-5005
CHEMets Refill, 30 ampoules	R-5005
Comparator 0, 0.01, 0.03, 0.05, 0.07, 0.1, 0.3, 0.5 ppm	C-5005
Kit comes in a plastic case and contains everything needed to perform 30 tests: Refill, Comparator, 25 mL sample cup and instructions.	



# Range: 0-50 ppm MDL: 1 ppm / Method: PDMAB Cat# VACUettes Kit VACUettes Refill, 30 ampoules Comparator 0, 1, 3, 5, 7, 10, 30, 50 ppm C-5005B Kit comes in a plastic case and contains eventhing peeded to perform 30

Kit comes in a plastic case and contains everything needed to perform 30 tests (except distilled water): Refill, Comparator, dilutor snapper cup, micro test tube and instructions.

Range: 0-500 ppm MDL: 10 ppm / Method: PDMAB	
	Cat#
VACUettes Kit	K-5005C
VACUettes Refill, 30 ampoules	R-5005C
Comparator 0, 10, 30, 50, 70, 100, 300, 500 ppm	C-5005C
Kit comes in a plastic case and contains everything needed to plastic tests (except distilled water): Refill, Comparator, dilutor snappetest tube and instructions.	



# **Multi-Analyte Photometers**

V-2000 / V-3000 Series

(See page 14 for instrumental features)

Range: 0-1.20 ppm / Spec: 0-0.700 ppm Method: PDMAB	
	Cat#
Vacu-vials Kit	K-5003
Kit comes in a cardboard box and contains everything needed to perform up to	

30 tests: thirty ampoules, 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 Hydrazine		
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	

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.

