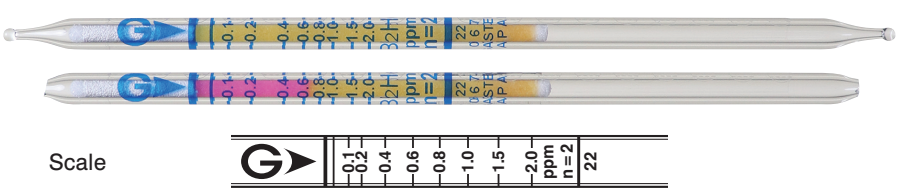
Diborane B_2H_6 No.22



Performance The minimum scale value (0.05ppm) is not printed on the tube, but only the scale line is printed.

Measuring range	0.015 to 0.05 ppm	(0.05) to 2.0 ppm	2.0 to 5.0 ppm
Number of pump strokes	5 (500 mL)	2 (200 mL)	1 (100 mL)
Correction factor	0.3	1	2.5
Sampling time	5 min	2 min	1 min

Detecting limit : 0.01 ppm (5 pump strokes)
Colour change : Yellow → Red
Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction used
Relative humidity 0 to 90 % correction not used
Relative standard deviation : 10 %(for 0.05 to 0.4 ppm), 5 %(for 0.4 to 2 ppm)
Tube quantity and number of tests per box : 10 tubes for 10 tests
Shelf life : 24 months

Reaction principle

$B_2H_6 + 6HgCl_2 \rightarrow 2B_2(HgCl)_3 + 6HCl$
$HCl + Base \rightarrow Chloride$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Arsine	≧ 1/10	+	Red
Hydrogen chloride	≧ 1/3	+	
Hydrogen selenide	≧ 1/10	+	
Phosphine	≧ 1/10	+	

Calibration gas generation

High pressure gas cylinder method

(Last updated: Mar. 2026)