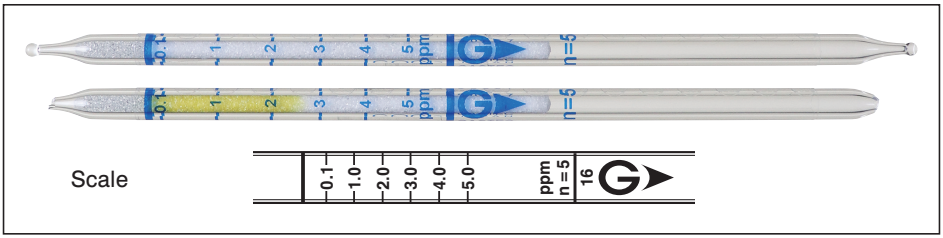
Phosgene $COCl_2$ No.16



Performance

Measuring range	0.05 to 0.1 ppm	0.1 to 5.0 ppm	5.0 to 31.5 ppm
Number of pump strokes	10 (1000 mL)	5 (500 mL)	1 (100 mL)
Correction factor	1/2	1	6.3
Sampling time	10 min	5 min	1 min

Detecting limit : 0.01 ppm (10 pump strokes)
Colour change : White → Yellow
Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction not used
Relative humidity 20 to 80 % correction not used
Relative standard deviation : 10 % (for 0.1 to 1 ppm), 5 % (for 1 to 5 ppm)
Tube quantity and number of tests per box : 10 tubes for 10 tests
Shelf life : 18 months (in the refrigerator)

Reaction principle

$COCl_2 + (CH_3)_2NC_6H_4CHO \rightarrow (CH_3)_2NC_6H_4CHCl_2 + CO_2$
$(CH_3)_2NC_6H_4CHCl_2 + (C_6H_5)_2NH \rightarrow$ Reaction product

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Chlorine	≧ 1/2	+	Yellow
Hydrogen chloride	≧ 1/10	+	
Nitrogen dioxide	≧ 1/5	+	

Calibration gas generation

Permeation tube method

(Last updated: Sep. 2026)