Methylene Chloride CH_2Cl_2 No.138

Scale

Performance

Measuring range	20 to 50 ppm	50 to 500 ppm
Number of pump strokes	2 (200 mL)	1 (100 mL)
Correction factor	0.4	1
Sampling time	6 min	3 min

Detecting limit : 10 ppm (2 pump strokes)
Colour change : White → Pale pink
Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction used
Relative humidity 0 to 90 % correction not used
Relative standard deviation : 15 % (for 50 to 100 ppm), 10 % (for 100 to 500 ppm)
Tube quantity and number of tests per box : 10 tubes for 5 tests
Shelf life : 36 months

Reaction principle

$CH_2Cl_2 + CrO_3 + H_2S_2O_7 \rightarrow Cl_2$
$Cl_2 + $ 3,3',5,5'-Tetramethylbenzidine $\rightarrow$ Pale pink product
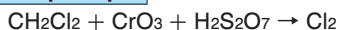
Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Chlorine, Bromine, Iodine		+	Pale pink
Unsaturated halogenated HCs		+	Pale pink
Saturated halogenated HCs		+	Pale pink

Other substance measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Ethyl chloride	Factor : 0.3	1	15 to 150 ppm

Calibration gas generation

Diffusion tube method