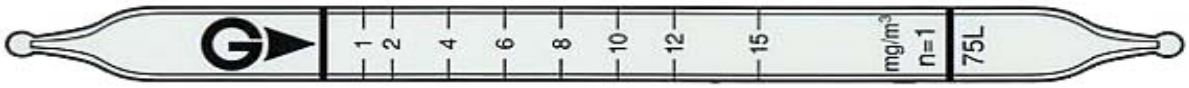
tert-Butyl mercaptan $(CH_3)_3CSH$ NO.75L



Performance

Measuring Range	0.5 to 1 mg/m^3	1 to 15 mg/m^3	15 to 30 mg/m^3
Number of Pump Stroke	2	1	1/2
Correction Factor	1/2	1	2
Sampling Time	1 minute per pump stroke		
Detecting Limit	0.1 mg/m^3 (n=2)		
Colour Change	Yellow → Pink		
Reaction Formula	tert-Butyl Mercaptan reacts with mercuric chloride to liberate hydrogen chloride which discolours the indicator to purple. $(CH_3)_3CSH + HgCl_2 \rightarrow (CH_3)_3CS\text{-}HgCl$ HCl + Basic compounds → Chlorides		
Coefficient of Variation	10% (for 1 to 4 mg/m^3), 5% (for 4 to 15 mg/m^3)		
Shelf Life	2 Years		
Corrections for temperature & humidity	Temperature correction is necessary		
Store the tubes in the refrigerator to keep at 10°C (50°F) or below.			

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Hydrogen sulphide	-	Plus error	Discolours pink stain
Other mercaptans	-	Plus error	Discolours pink stain
Dimethyl disulphide	-	No error	No discolouration

Other substance measurable with this detector tube

Substance	Correction Factor	No. of pump strokes	Measuring range
2-Mercaptoethanol	0.5	1	0.5 to 7.5 ppm

Calibration gas generation Diffusion tube method

TLV-TWA	TLV-STEL	Explosive range
-	-	-

Special note

tert-Butyl mercaptan is used as an odorant in fuel gases for warning of their leakage