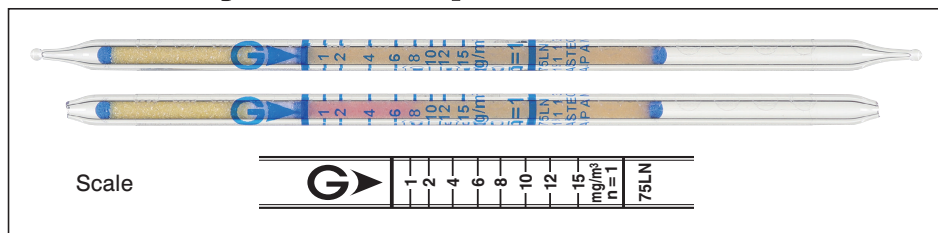


# tert-Butyl Mercaptan (CH<sub>3</sub>)<sub>3</sub>CSH No.75LN



## Performance

Measuring range	0.5 to 1 mg/m <sup>3</sup>	1 to 15 mg/m <sup>3</sup>	15 to 39 mg/m <sup>3</sup>
Number of pump strokes	2 (200 mL)	1 (100 mL)	1/2 (50 mL)
Correction factor	1/2	1	2.6
Sampling time	3 min	1.5 min	45 sec
Detecting limit :	0.3 mg/m <sup>3</sup> (2 pump strokes)		
Colour change :	Yellow → Pink		
Operating conditions :	Temperature 0 to 40 °C (32 to 104 °F) correction used Relative humidity 0 to 90 % correction used		
Relative standard deviation :	10 % (for 1 to 4 mg/m <sup>3</sup> ), 5 % (for 4 to 15 mg/m <sup>3</sup> )		
Tube quantity and number of tests per box :	10 tubes for 10 tests		
Shelf life :	24 months (in the refrigerator)		

## Reaction principle

tert-Butyl mercaptan reacts with the reagent to form intermediate material which stains indicator pink

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Hydrogen sulphide		+	} Pink
Phosphine		+	
Other mercaptans		+	
Dimethyl disulphide	≦ 3.85 mg/m <sup>3</sup>	No	No (≦ 3.85 mg/m <sup>3</sup> )
Methane		No	No
Propane	≦ 30 %	No	No (≦ 30 %)
Propylene	≦ 2 %	No	No (≦ 2 %)
Cyclohexene	≦ 35 mg/m <sup>3</sup>	No	No
Dimethyl sulphide	≦ 15 mg/m <sup>3</sup>	No	No

## Calibration gas generation

Diffusion tube method

## Special note

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