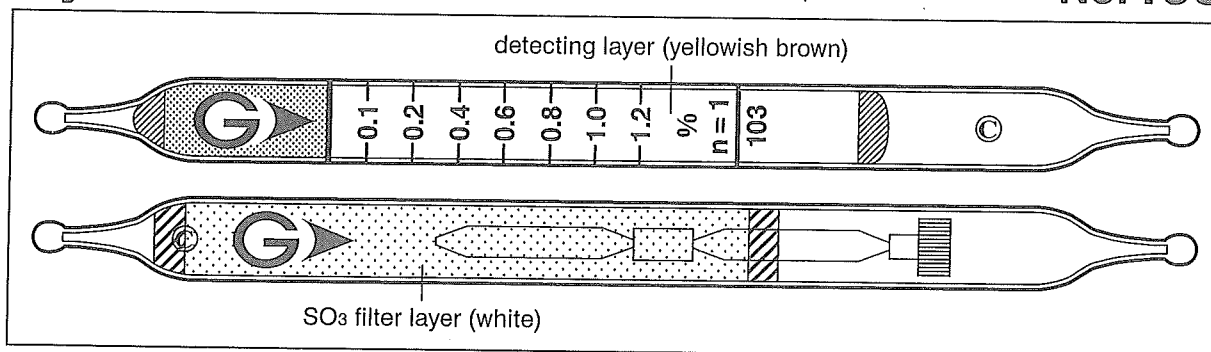


Hydrocarbons (Lower Class) C₂ to C₇ No. 103



Performance

Measuring range	0.05 to 0.1 %	0.1 to 1.2 %	1.2 to 2.4 %
Number of pump strokes	2 (200 ml)	1 (100 ml)	1/2 (50 ml)
Correction factor	1/2	1	2
Sampling time	4 min	2 min	1 min

Detecting limit : 0.01 % (2 pump strokes)
 Colour change : Yellowish brown → Greenish brown
 Corrections for temperature & humidity : Unnecessary
 Relative standard deviation : 10 % (for 0.1 to 1.2 %)
 Shelf life : 2 years

Reaction principle

Detector tube : Hydrocarbon (C₂ to C₇) + Cr⁶⁺ + H₂S₂O₇ → Cr³⁺
 SO₃ filter tube : Traps SO₃ to prevent it from entering the sampling pump.

Possible coexisting substances and their interferences (NOTE : Page 2-5)

Substance	Concentration	Interference	Changes colour by itself to
Organic solvents		+	Greenish brown
Carbon monoxide		No	No
Ethane, Methane		No	No

Substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Acetylene	Factor : 1.5	} 1/2, 1, or 2	0.075 to 3.6 %
Butane, Heptane, Isobutane	Factor : 0.7		0.035 to 1.68 %
Ethylene	Factor : 7.0		0.35 to 16.8 %
Hexane	Factor : 0.5		0.025 to 1.2 %
Isopentane	Factor : 0.9		0.045 to 2.16 %
Pentane	Factor : 0.75		0.0375 to 1.8 %
Propane	Factor : 1.0		0.05 to 2.4 %

Calibration gas generation

High pressure gas cylinder method

Special note

9 detector tubes and 1 SO₃ filter tube are contained in one box.
 SO₃ filter tube can be reused up to 9 times.