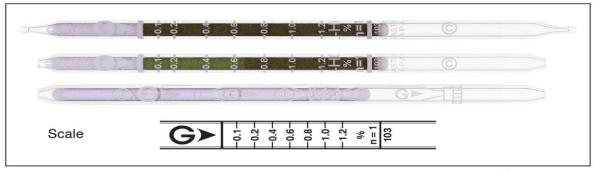




Hydrocarbons (Lower Class) C2 to C7

Part No.: 103

Hydrocarbons (Lower Class) C2 to C7 No.103



When used, these tubes are to be connected. See page 2-3.

Performance

This detector tube is calibrated with Propane.

Measuring range	0.05 to 0.1 %	0.1 to 1.2 %	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:

Colour change : Operating conditions :

0.01 % (2 pump strokes)
Yellowish brown → Greenish brown
Temperature 0 to 40 °C (32 to 104 °F) correction not used
Relative humidity 0 to 90 % correction not used
10 % (for 0.1 to 1.2 %)
10 tubes for 9 tests

Relative standard deviation:

Tube quantity and number of tests per box : 30 months

Shelf life :

Reaction principle

Hydrocarbon (C₂ to C₇) + Cr^{6} + $H_2S_2O_7 \rightarrow Cr^{3}$ +

Possible coexisting substances and their interferences

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 factor	n	Measuring range (%)
Acetylene	3	1/2	1.8 to 3.6
	1.5	1	0.15 to 1.8
	0.75	2	0.075 to 0.15
Isobutane, Butane, Heptane	1.4	1/2	0.84 to 1.68
	0.7	1	0.07 to 0.84
	0.35	2	0.035 to 0.07
Isopentane	1.8	1/2	1.08 to 2.16
	0.9	1	0.09 to 1.08
	0.45	2	0.045 to 0.09
Ethylene	14	1/2	8.4 to 16.8
	7	1	0.7 to 8.4
	3.5	2	0.35 to 0.7
Propane	2	1/2	1.2 to 2.4
	1 1	1	0.1 to 1.2
	0.5	2	0.05 to 0.1
Hexane	1	1/2	0.6 to 1.2
	0.5	1	0.05 to 0.6
	0.25	2	0.025 to 0.05
Pentane	1.5	1/2	0.9 to 1.8
	0.75	1	0.075 to 0.9
	0.375	2	0.0375 to 0.075

Calibration gas generation

High pressure gas cylinder method

Special note

When measuring, the SO₃ filter tube (white) should be connected to the back of the detector tube. SO₃ filter tube can be reused up to nine times.

Nine detector tubes and one SO₃ filter tube are contained in one box.