



RAE Systems, Inc.
1339 Moffett Park Dr.
Sunnyvale, CA 94089 USA

Telephone 408-752-0723
Tube Orders 1-888-723-8823
Web www.raesystems.com

Gas Detection Tube Data Sheet

Total Hydrocarbons HC No. 10-110-30

	Extended Range	Standard Range	Extended Range
Range (ppmv)	25 - 500	50-1000	100-2000
No. of Pump Strokes	4	2	1
Sample Volume (mL)	400	200	100
Sample Time (min)	4 x 2	2 x 2	2
Correction Factor	0.5	1	2

Precision (Relative Standard Deviation)*: $\leq \pm 20\%$

Linearity with No. of Pump Strokes: $r^2 = 0.994$

Humidity: No effect 5 - 100% RH

Temperature Range: 0 - 40°C
(32 - 104°F)

Temp (°C/°F)	0/32	10/50	25/77	40/104
Corr. Factor	1.2	1.1	1.0	0.85

Storage Life: 2 years in darkness at 5 - 25°C (40 - 77°F). Refrigeration referred.

Color Change: Yellow-Orange → Green

Reaction Principle: $HC + Cr(VI) + H_2SO_4 \rightarrow Cr(III) + \text{Oxidation Products}$

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*	Corr. Factor
Methane	25000	0	-
Ethylene	100	165	0.6
Propane	100	Entire tube faint	-
Isobutane	100	100	1.0
n-Pentane	500	700	0.7
n-Hexane	1200	870	1.4
n-Heptane	1000	525	1.9
n-Octane	400	103	3.9
n-Decane	1000	500	2.0
Isopar L	500	50	10
Benzene	500	Unclear endpoint	-
Toluene	1000	110	9
Xylene	1000	60	17
Isobutylene	1000	20	50
Acetone	10000	60	170
Isopropanol	1000	<20	>50
Ethyl Acetate	1000	<20	>50
1,2-Dichloroethane	200	0	-
H ₂ S	1000	250	4.0

*Data based on RAE pumps and tubes used in standard range.

Other Possible Interferences: No response to 3000 ppm CO, 300 ppm NH₃, or 200 ppm SO₂

Caution: Dispose of spent or expired tubes according to local regulations.
Possibly hazardous materials are given under the section Reaction Principle.