



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

Ethanol C₂H₅OH

No. 10-141-30

	Extended Range	Standard Range	Extended Range
Range (ppmv)	50-200#	100 - 2000	
No. of Pump Strokes	2	1	
Sample Volume (mL)	200	100	
Sample Time (min)	2 x 3	3	
Correction Factor	0.5#	1	

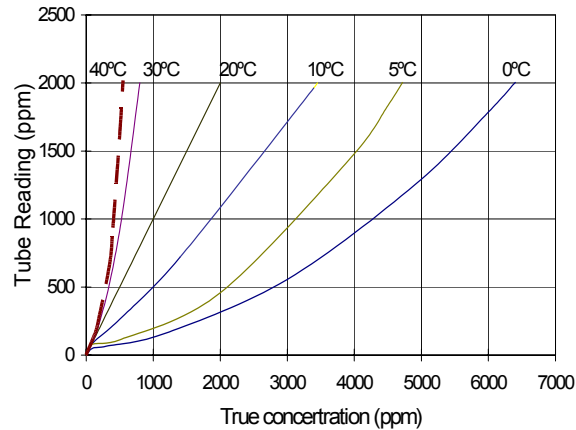
This CF only applies between 50-200 ppm; for higher concentrations use one stroke.

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

Linearity with No. of Pump Strokes: $r^2 = 0.87$

Humidity: No effect 5 - 95% RH

Temperature Range:



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

Color Change: Orange Yellow → Pale Green

Reaction Principle: $C_2H_5OH + Cr(VI) + H_2SO_4 \rightarrow Cr(III) + \text{Oxidation Products}$.

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



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<u>Cross-sensitivity:</u> Substance	Concentration (ppmv)	Apparent Reading*	Correction Factor
Methanol	1000	1000	1.0
Isopropanol	1000	750	1.3
Tert-butanol	1000	1300	0.77
Methyl mercaptan	500	300	1.7
H ₂ S	100	0	-
CH ₄	25000	0	-
CO ₂	5000	0	-
CO	1000	0	-
NH ₃	400	0	-
NO	100	130	0.77
Benzene	100	0	-
n-Hexane	100	0	-
Ethyl acetate	1000	0**	-

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

** Faint brown color over entire tube, but no effect on ethanol reading.

Other Possible Interferences: Other alcohols and mercaptans.

Caution: Dispose of spent or expired tubes according to local regulations.
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