

Ethylene oxide

C₂H₄ Humidity Correction
4O

NO. 163LL



Performance

Measuring Range	0.1 to 5 ppm	5 to 10 ppm
Number of Pump Stroke	4	2
Correction Factor	1	2
Sampling Time	1.5 minutes per pump stroke	
Detecting Limit	0.05 ppm (n=4)	
Color Change	Yellow → Pale orange	
Reaction Formula	$\text{C}_2\text{H}_4 \text{ Humidity Correction } 4\text{O} \longrightarrow 2\text{HCHO}$ $3\text{HCHO} + (\text{NH}_2\text{OH})_3 \text{ Humidity Correction } 3\text{PO}_4 \longrightarrow \text{H}_3\text{PO}_4$ $\text{Humidity Correction } 3\text{PO}_4 + \text{Base} \longrightarrow \text{Phosphate}$	
Coefficient of Variation	15% (for 0.1 to 0.5 ppm), 10% (for 1 to 5 ppm)	
Shelf Life	1 Year	
Corrections for temperature & humidity	Temperature correction is necessary	
Store the tubes in the refrigerator to keep at 10°C (50°F) or below.		

Possible coexisting substances and their interferences (NOTE)

Substance	Concentration	Interference	Change color by itself
Aldehydes	1/10 times	Plus error	Discolor pale orange
Ketones	-	Plus error	Discolor pale orange
Alcohols	1/10 times	No effect	No discoloration

Calibration gas generation Permeation tube method

TLV-TWA	TLV-STEL	Explosive range
1ppm	-	3.6 to 100%

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Policy Statement and Legal Notices

Nextteq is Gastec's Exclusive U.S. Master Wholesale Distributor. Gastec tubes and pumps are manufactured by the Gastec Corporation.