Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

Carbon Dioxide CO2

TLV (STEL): 30,000 ppm TLV (TWA): 5000 ppm Non-Flammable

Specification:

Measurement Range	Extended	Standard	Extended		
	0.125 - 0.25%	0.25 – 3%	3 – 6%		
No. of Pump Strokes	2 (200 mL)	1 (100 mL)	0.5 (50 mL)		
Volume Correction Factor (VCF)*	0.5	1.0	2.0		
Sampling Time	2.5 minutes per pump stroke (100 mL)				
Color Change	Blue → Off white				
Shelf Life	2 years				
Storage condition	Below 10°C (50°F)				
Calibration condition	Calibrated at 20°C (68°F) and 50% RH.				
Reaction Principle	CO_2 + NaOH \rightarrow Na ₂ CO ₃ + H ₂ O				
Relative standard deviation	± 10 – 15 %				

^{*} Multiply the observed reading by the correction factor (VCF) to obtain the true concentration.

Possible interferences:

Compound	Concentration (%)	Interference	Colour change / Comments
Carbon Monoxide	1.5	No	No Effect
Hydrogen Sulphide	0.2	+	
Ammonia	5	No	No Effect
Sulphur dioxide	0.02	+	

Correction for Environmental Parameters:

Temperature (°C):	4	20	30	40	
Temperature Correction Factor (TCF) *	0.82	1	1.03	1.13	
Relative humidity	Not necessary between 10 - 90 %				

^{*} Multiply the observed reading by the correction factor (VCFXTCF) to obtain the true concentration.