Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

Carbon Dioxide

CO2

SCD-5.1

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

Specification:

Measurement Range	Extended	Standard	Extended		
	0.015 - 0.03 %	0.03 - 0.5 %	0.5 - 1 %		
No. of Pump Strokes	4 (400 mL)	2 (200 mL)	1 (100 mL)		
Volume Correction Factor (VCF)*	0.5	1.0	2.0		
Sampling Time	3.5 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 (ppm)	Interference	Colour change / Comments
Carbon Monoxide	3000	No	No effect
Ammonia	50000	No	No effect
Nitrogen dioxide	200	No	No effect
Sulphur dioxide	2050	+	
n-Hexane	1500	No	No effect
Toluene	400	No	No effect

Correction for Environmental Parameters:

Temperature (°C):	4	20	30	40	
Temperature Correction Factor (TCF) *	0.9	1	1.1	1.2	
Relative humidity	Not necessary between 10 - 90 %.				

Multiply the observed reading by the correction factor (VCFXTCF) to obtain the true concentration.