Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

Carbon Dioxide

CO₂

SCD-10

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

Specification:

Management Dance	Extended	Standard	Extended		
Measurement Range	2.5 - 30%	5 - 60%	Do not extend		
No. of Pump Strokes	1 (100 mL)	0.5 (50 mL)			
Volume Correction Factor (VCF)*	0.5	1.0			
Sampling Time	2.0 minutes for ½ pump stroke (50 mL)				
Color Change	Blue → Off white				
Shelf Life	2 year				
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	
Methane	2.5	No	No Effect	
Carbon monoxide	3.8	No	No Effect	
Ammonia	0.05	No	No Effect	
Nitrogen dioxide	0.01	No	No Effect	
Hydrogen sulphide	1	No	No Effect	
Sulphur dioxide	3.5	No	No Effect	
n-Hexane	0.12	No	No Effect	
Toluene	0.01	No	No Effect	

Correction for Environmental Parameters:

Temperature (°C):	4	20	30	40
Temperature Correction Factor (TCF) *	0.93	1	1.06	1.24

Not necessary between 10 - 90 %. Relative humidity

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