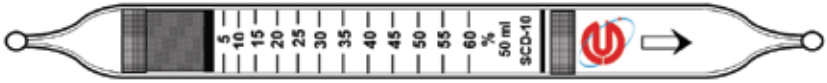
Carbon Dioxide CO_2 SCD-10



Specification :

Measurement Range	Extended	Standard	Extended
	2.5 - 5%	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		
Detection Limit	1 % (1 pump stroke)		
Shelf Life	3 years		
Relative standard deviation	± 10 – 15 %		

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

Reaction Principle :

$CO_2 + NaOH \rightarrow Na_2CO_3 + H_2O$

Possible Interferences :

Compound	Concentration (%)	Interference	Color 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
Relative humidity	Not necessary between 10 - 90 %.			

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

Calibration Of The Tube :

Static gas dilution method.

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