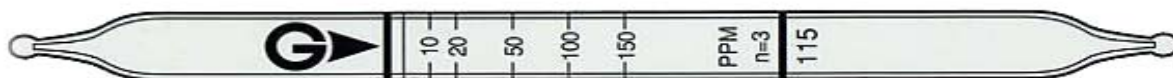


2-Butanol



NO.115



Performance

Measuring Range	5 to 150 ppm
Number of Pump Strokes	3
Correction Factor	1
Sampling Time	3 minutes per pump stroke
Detecting Limit	1 ppm (n=3)
Colour Change	Yellow → Pale blue
Reaction Principle	Sec-Butyl alcohol reduces potassium dichromate to form chromic sulfate, which is blue in colour $\text{CH}_3\text{CH}_2\text{CH}(\text{OH})\text{CH}_3 + \text{Cr}^{6+} + \text{H}_3\text{PO}_4 \rightarrow \text{Cr}^{3+}$
Coefficient of Variation	15% (for 5 to 50 ppm), 10% (for 50 to 150 ppm)
Shelf Life	3 Years
Corrections for temperature & humidity	Temperature correction is necessary
Store the tubes at cool and dark place.	

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Alcohols	-	Plus error	Produces pale blue stain

Calibration gas generation Diffusion tube method

TLV-TWA	TLV-STEL	Explosive range
100ppm	-	1.7 to 9.8%