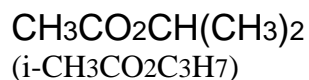


# Isopropyl acetate



NO.146



## Performance

Measuring Range	10 to 500 ppm
Number of Pump Strokes	2
Correction Factor	1
Sampling Time	4 minutes per pump stroke
Detecting Limit	5 ppm (n=2)
Colour Change	Yellow → Blackish brown → Pale blue after few minutes
Reaction Principle	Isopropyl acetate reduces chromic acid to produce blackish brown. $\text{CH}_3\text{CO}_2\text{CH}(\text{CH}_3)_2 + \text{Cr}^{6+} + \text{H}_2\text{SO}_4 \rightarrow \text{Cr}^{3+}$
Coefficient of Variation	15% (for 20 to 100 ppm), 10% (for 100 to 500 ppm)
Shelf Life	2 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	Produce blackish brown then turns to pale blue
Ketones	-	Plus error	
Esters	-	Plus error	

## Calibration gas generation Diffusion tube method

TLV-TWA	TLV-STEL	Explosive range
100ppm	200ppm	1.8 to 8%