

## **Performance**

Measuring Range	2 to 50 ppm	50 to 100 ppm		
Number of Pump Strokes	3	2		
Correction Factor	1	2		
Sampling Time	3 minutes per pump stroke			
Detecting Limit	0.2 ppm (n=3)			
Colour Change	Pale Yellow —►Yellow			
Reaction Principle	Methyl cyclohexanone reacts with 2,4-dinitrophenylhydrazineto form dinitropnenylhydrazone to produce yellow in colour.  C <sub>7</sub> H <sub>12</sub> O + C <sub>6</sub> H <sub>3</sub> (NO <sub>2</sub> ) <sub>2</sub> NHNH <sub>2</sub> → (CH <sub>3</sub> ) <sub>2</sub> C:NNHC <sub>6</sub> H <sub>3</sub> (NO <sub>2</sub> ) <sub>2</sub>			
Coefficient of Variation	15% (for 2 to 10 ppm), 10% (for 10 to 50 ppm)			
Shelf Life	2 Years			
Corrections for temperature & humidity	Temperature correction is necessary			
Store the tubes in the refrigerator to keep at 10°C (50°F) or below.				

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Ketones	-	Plus error	Discolours to yellow

## Calibration gas generation Diffusion tube method

TLV-TWA	TLV-STEL	Explosive range
50ppm	75ppm	1.15% or higher