

Performance

| Measuring range | 5 to 1500 ppm |
|-----------------|---------------|
| Sampling time | 1 to 10 hours |

Colour change : Yellow → Reddish brown

Corrections for temperature & humidity: Temperature correction is necessary.

Relative standard deviation: 10 % (for 50 to 1500 ppm·hr)

Shelf life: 2 years (in the refrigerator)

Reaction principle

 $3CH_3COCH_3 + (NH_2OH)_3H_3PO_4 \rightarrow H_3PO_4$

H₃PO₄ + Base → Phosphate

Possible coexisting substances and their interferences

| Substance | Concentration | Interference | Changes colour by itself to |
|----------------------------------|---------------|--------------|---|
| Aldehydes, Ketones Acid gases | | ++ | Reddish brown Reddish brown (Unclear demarcation) |

Other substances measurable with this Dosi-tube

| Substance | Correction | Sampling time | Measuring range |
|--|------------------------------|---------------|-------------------------------------|
| Acetaldehyde | Factor: 0.8 | 1 to 10 hours | 4 to 1200 ppm |
| Methyl ethyl ketone Methyl isobutyl ketone | Factto : 1.3 Factor : 2.3 | T to 10 hours | 6.5 to 1950 ppm 11.5 to 3450 ppm |

Calibration gas generation

Diffusion tube method