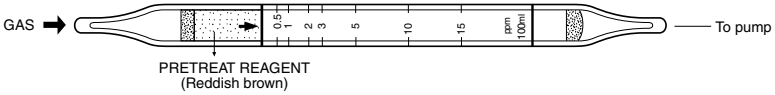
Tube No.
175U

NITROGEN OXIDES



1. PERFORMANCE

1) Measuring range : 1.0-30 ppm 0.5-15 ppm
Number of pump strokes 1/2(50mℓ) 1(100mℓ)
2) Sampling time : 1 minute/1 pump stroke
3) Detectable limit : 0.2 ppm(100mℓ)
4) Shelf life : 3 years(Necessary to store in a refrigerated place ; 0 ~ 10℃)
5) Operating temperature : 0 ~ 40℃
6) Reading : Direct reading from the scale calibrated by 1 pump stroke
7) Colour change : White→Pale purple

2. RELATIVE STANDARD DEVIATION

RSD-low : 10% RSD-mid. : 5% RSD-high : 5%

3. CHEMICAL REACTION

NO ; By reacting with an Oxidizer, NO_2 is produced.
$NO + CrO_3 + H_2SO_4 \rightarrow NO_2$
NO_2 + 3, 3'-Dimethylnaphthidine→Nitroso-compound
NO_2 ; By reacting with 3, 3'-Dimethylnaphthidine, Nitroso-compound is produced.
NO_2 + 3, 3'-Dimethylnaphthidine→Nitroso-compound

4. CALIBRATION OF THE TUBE

NO ; STANDARD GAS CYLINDER METHOD
NO_2 ; PERMEATION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Chlorine	Similar stain is produced.		The accurecy of reading is not affected.
Hydrogen chloride	〃		〃
Sulphur dioxide	The accuracy of reading is not affected.	500	Lower readings are given.
Hydrogen sulphide	〃	5	〃
Ozone	〃		
Hexane	〃		
Laughing gas	〃		

(NOTE)
In case of 1/2 pump strokes, following formula is available for the actual concentration.
Actual concentration = 2 × Reading value