

# $\alpha$ -PINENE



# **1. PERFORMANCE**

<ol> <li>Measuring range Number of pump strokes</li> </ol>	: 20-300 ppm 1(100mℓ)
2) Sampling time	: 1 minute/1 pump stroke
3) Detectable limit	: -
4) Shelf life	: 3 years
5) Operating temperature	: 15 ∼ 25 °C
6) Reading	: The tube scale is calibrated based on Styrene at 1 pump stroke and <i>a</i> -Pinene concentration is determined by using a conversion chart at 1 pump stroke
7) Colour change	: White - Yellow

## 2. RELATIVE STANDARD DEVIATION

RSD-low: 15% RSD-mid.: 15% RSD-high: 10%

#### **3. CHEMICAL REACTION**

A polymer of  $\alpha$ -Pinene is produced by Sulphuric acid.

# 4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Acrylonitrile	The accuracy of readings is not affected.	400	Lower readings are given.
Butadiene	Similar stain is produced and higher readings are given.	5	Uneven discolouration is produced and higher readings are given.
Formaldehyde	"	15	Yellowish orange stain is produced and higher readings are given.
Acetaldehyde	"	350	Similar stain is produced and higher readings are given.
Methyl alcohol	The accuracy of readings is not affected.	0.35 %	Pale discolouration is produced and higher readings are given.
Ethyl alcohol	//	0.18%	//
Ethyl acetate	//	700	//
Butyl acetate	"	700	"

α-Pinene concentration (ppm)

