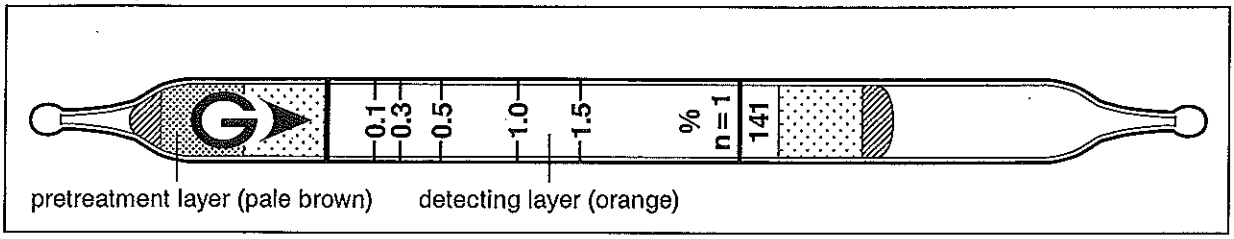
Ethyl Acetate $CH_3CO_2C_2H_5$ No.141



Performance

Measuring range	0.1 to 1.5 %
Number of pump strokes	1 (100 ml)
Correction factor	1
Sampling time	1.5 min

Detecting limit : 0.01 % (1 pump stroke)
Colour change : Orange → Dark green
Corrections for temperature & humidity : Temperature correction is necessary.
Relative standard deviation : 10 % (for 0.1 to 0.3 %), 5 % (for 0.3 to 1.5 %)
Shelf life : 3 years

Reaction principle

$CH_3CO_2C_2H_5 + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

Possible coexisting substances and their interferences (NOTE : Page 2-5)

Substance	Concentration	Interference	Changes colour by itself to
Propane	≧ 2000 ppm	+	Dark green (whole layer)
Alcohols, Esters, Ketones		+	Dark green
Aromatic hydrocarbons	≧ 500 ppm	+	
Hydrogen sulphide	≧ 500 ppm	+	
Sulphur dioxide	≧ 500 ppm	+	Green

Water vapour is trapped in the pretreatment (pale brown) layer.

Other substance measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Vinyl acetate	Factor : 0.6	1	0.06 to 0.9 %

Calibration gas generation

Static gas dilution method

TLV-TWA : 400 ppm
Explosive range : 2 to 11.5 %