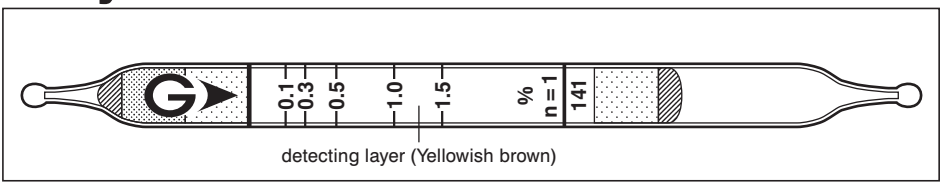
Ethyl Acetate $CH_3CO_2C_2H_5$ No.141



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 : Yellowish brown → Greenish brown
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

Substance	Concentration	Interference	Changes colour by itself to
Propane	≧ 0.2 %	Cannot use	Greenish brown (whole layer) (≧ 0.2 %)
Alcohols, Esters, Ketones		+	Greenish brown
Aromatic hydrocarbons	≧ 500 ppm	+	Greenish brown (≧ 500 ppm)
Hydrogen sulphide	≧ 500 ppm	+	Greenish brown (≧ 500 ppm)
Sulphur dioxide	≧ 500 ppm	+	Green (≧ 500 ppm)

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