

### Performance

Measuring range	20 to 800 ppm	
Number of pump strokes	2 (200 ml)	
Correction factor	1	
Sampling time	4 min	

Detecting limit : 5 ppm (2 pump strokes)
Colour change : Yellow → Blackish brown

(few minutes later) → Light blue Corrections for temperature & humidity : Temperature correction is necessary.

Relative standard deviation: 15 % (for 20 to 200 ppm), 10 % (for 200 to 800 ppm)

Shelf life: 2 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
Alcohols, Esters, Ketones		+	} Dark green
Aromatic hydrocarbons		+	

Water vapour is trapped in the pretreatment (white) layer.

# Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Cymene	Factor: 0.28	2	5.6 to 224 ppm
Diisopropyl benzene	Factor: 0.5	1/2	10 to 400 ppm
Ethyl acrylate	Factor: 0.4	2	8 to 320 ppm
2-Hexyl alcohol	Factor: 3.0	3	60 to 2400 ppm
Isopropyl ether	Factor: 0.9	2	18 to 720 ppm
Mesityl oxide	Factor: 1.35	2	27 to 1080 ppm
Methyl acrylate	Factor: 0.4	2	8 to 320 ppm
Methyl isothiocyanate	by scale	2	50 to 400 ppm

#### Calibration gas generation

Diffusion tube method