Order No.
67 28591

Acrylonitrile 0.5/a

Standard Measuring Range	:	1 to 20 / 0.5 to 10 ppm
Number of Strokes (n)	:	10 / 20
Time for Measurement	:	app. 2 min / app. 4 min
Standard Deviation	:	± 15 to 20 %
Colour Change	:	yellow —> red

Ambient Operating Conditions

Temperature	:	0 to 40 °C
Absolute Humidity	:	2 to 15 mg H_2O / L

Reaction Principle

a) $CH_2=CH\text{-}CN + Cr^{VI}$ —> HCN
b_1) HCN + $HgCl_2$ —> HCl
b_2) HCl + Methyl red —> red reaction product

Cross Sensitivity

No influence on the acrylonitrile concentration by 1,000 ppm acetone, 20 ppm benzene, 1,000 ppm ethyl acetate, 1,000 ppm ethanol, 10 ppm ethyl benzene, 1,000 ppm hexane, 50 ppm styrene or 100 ppm toluene.

Butadiene reacts with the oxidation layer; in the presence of butadiene, the acrylonitrile indication will be too low (e.g. up to -50% too low with 400 ppm butadiene).

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