DART SENSORS

Calibration Standards for Electronic Breath Analysers

COMPOSITION DATA

35 microgram ethanol in water solution.

Accuracy required: 88.70 to 91.40 mg/100 cm3

Water	99.66 %
Ethanol	0.09%
CuSO4.5H2O	0.25% min.

140 microgram ethanol in water solution.

Accuracy required: 354.81 to 365.61 mg/100 cm3

Water	99.39%
Ethanol	0.36%
CuSO4.5H2O	0.25% min.

50 microgram ethanol in water solution.

Accuracy required: 126.72 to 130.58 mg/100 cm3

Water	99.62 %
Ethanol	0.13%
CuSO4.5H2O	0.25% min.

200 microgram ethanol in water solution.

Accuracy required: 506.87 to 522.31 mg/100 cm3

Water	99.24 %
Ethanol	0.51%
CuSO4.5H2O	0.25% min.

HANDLING & STORAGE

Avoid extremes of temperature.

Store in a cool dark place.

Ethanol supplied by Honeywell (specification below)

Ethyl alcohol, Pure 200 proof, ACS reagent, 99.5%

Parameter	Specification	Units
identity (IR)	complying	
assay acc. to ACS (GC)	min. 99.50	%
non-volatile matter	max. 0.001	%
water (Karl Fischer)	max. 0.2	%
titrable acid	max. 0.0005	meq/g
titrable base	max. 0.0002	meq/g
solubility in water	complying	
KMNO4 red. matter	complying	
reaction against H2SO4	complying	
acetone and 2-propanol acc.to ACS	complying	
methanol (GC)	max. 0.1	%
APHA	max. 10	

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ISO 9001
ISO 14001
ISO 45001
INTEGRATED MANAGEMENT

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