

Technical Data Sheet ETHYLENE OXIDE (EO)

General



EINECS No.: 200-849-9

IUPAC name: Oxirane

MW: 44.053 gmol⁻¹

CAS No.: 75-21-8

Sales Specification

Characteristic	Unit	Specification	Methods of Analysis
Appearance	-	Clear liquid	200
Assay	w%	min 99.97	calculated
Carbon dioxide	ppm	max 0.5	554
Formaldehyde	ppm	max 15	554
Aldehydes (as acetaldehyde)	ppm	Max 50	550
Water	w%	max 0.02	557

Methods of Analysis are available upon request.

In case of dispute, the listed Method of Analysis will be used as reference methods.

Physical and Chemical Properties

Property	Value	Property	Value
Form	gaseous	Melting point/freezing point	-111 °C at 1 013 hPa
Colour	colourless	Boiling point/boiling range	10,7 °C at 1 013 hPa
Odour	colourless	Flash point	-57 °C Method: DIN 51755
Flammability (solid, gas)	Extremely flammable aerosol. Chemically unstable at 20 °C temperature and a standard pressure of 101.3 kPa	Vapour pressure	1 752 hPa at 25 °C
Explosive properties	Explosive	Relative vapour density	
Oxidizing properties	Not classified as oxidising	Density	890 kg/m ³ at 10 °C
Water solubility	Miscible at 20 °C	Relative density	0,88 at 10,5 °C
		Partition coefficient: n-octanol/water	log Pow: -0,3 at 25 °C
		Viscosity, dynamic	0,254 mPa.s at 10 °C

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