

Ethylene Oxide (EO)



Important raw materials used in large-scale chemical production

CAS number
75-21-8

EINECS/ELINCS No.
200-849-9

Molecular weight
44.05

Molecular formula
C₂H₄O

Specifications

Appearance (MOA 200)	Clear liquid
Assay (calculated)	≥ 99.97 wt%
Aldehydes as acetaldehyde (MOA 550)	≤ 50 ppm
Carbon dioxide (MOA 554)	≤ 10 ppm
Formaldehyde (MOA 554)	≤ 15 ppm
Water (MOA 557)	≤ 0.02 wt%

Characteristics

Color	Colorless
Odor	Odorless
Explosive properties	Yes
Flammability, liquids	Extremely flammable aerosol. Chemically unstable at 20°C and 101.3 kPa
Oxidizing properties	No
Water solubility	Soluble, 20°C
Melting point/freezing point, 1013 hPa	-111 °C
Boiling point/boiling range, 1013 hPa	10.7 °C
Flash point, 1013 hPa, DIN 51755	-57 °C
Density, 10°C	890 kg/m ³
Relative density, 10.5°C	0.88
Partition coefficient, N-octanol/water, 25°C, log Pow	-0.3
Dynamic viscosity, 10°C	0.254 mPa.s

Notes:

Methods of Analysis (MOA) are available upon request. In case of dispute, the listed Method of Analysis will be used as reference methods.

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Nouryon, however, makes no warranty as to accuracy and/or sufficiency of such information and/or suggestions, as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Nouryon does not accept any liability whatsoever arising out of the use of or reliance on this information, or out of the use or the performance of the product. Nothing contained herein shall be construed as granting or extending any license under any patent. Customer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes. The information contained herein supersedes all previously issued information on the subject matter covered. The customer may forward, distribute, and/or photocopy this document only if unaltered and complete, including all of its headers and footers, and should refrain from any unauthorized use. Don't copy this document to a website.

For more information, please visit our website at www.nouryon.com.

The logo for Nouryon, featuring a stylized blue 'N' followed by the word 'ouryon' in a blue sans-serif font.