

PRODUCT CODE: 121316

Ethylene Glycol (Reag. USP, Ph. Eur.) for analysis

$C_2H_6O_2$

CH_2OHCH_2OH



M.= 62,07

CAS [107-21-1]

EINECS 203-473-3

TARIC 2905 31 00 00

SYNONYMS: 1,2-Dioxyethane, 1,2-Ethanediol, Glycol

PHYSICAL DATA: liquid, Clear, Colourless, Miscible with water • Hygroscopic • D 20/4 1,114 • M.P.: -12 °C • B.P.: 198 °C • n_{20/D} : 1,4318 • Flash P.:111 °C • Ign. T.:410 °C • Vap. press. (20 °C) 0,06 hPa • Dielec. constant 25 °C 37,7 • Evap. number (DIN 53170) 600 • Satur. conc. 20 °C 0,15 g/m³ • Expl. limit 3,2 % (V) 15,3 % (V) •

BIBLIOGRAPHY: Merck Index **12**, 3.844 13, 3.832 Sax **EJC500** • Safety **2**, **1609 D** • Kühn-Birett **G 2** • Ullmann **(5.)**10, 101 • Beilstein **1**, **465 I**, **242 II**, **514 III**, **2052 IV**, **2369** • BRN 505945 • Fieser **1375 5296 9217 15156** •

HAZARDOUS: C.E: 603-027-00-1 • RTECS: KW 2975000 • LD L0 oral man 398 mg/kg • LD L0 oral hmn 786 mg/kg • LD50 oral rat 4.700 mg/kg • TC L0 man 10000mg/m³ • LD50 skn rbt 9.530 mg/kg • VLA-EC 40 ppm104 mg/m³ VLA-ED 20 ppm52 mg/m³



H: H302 •

P: P264 • P270 • P301+P312 • P330 • P501 •

WEIGHT/VOLUME INFORMATION: 1l-1,115 kg 1kg-0,897 l

SPECIFICATIONS:

Minimum assay (G.C.)

99,5%

Identity :

Identity

IR passes test

Density at 20/20

1,113-1,115

Range of Boiling

194-200 °C

Maximum limit of impurities

APHA colour	10
Acidity	0,0005 meq/g
Insoluble matter in H ₂ O	passes test
Reducing substance to KMnO ₄ (as O)	0,0003 %
Darkened substances by H ₂ SO ₄	passes test
Residue on ignition (as SO ₄)	0,003 %
Chloride (Cl)	0,0001%
Sulfate (SO ₄)	0,0005%
Diethyleneglycol (G.C.)	0,05%
Water (H ₂ O)	0,1 %
Ca	0,00005 %
Cd	0,000005 %
Co	0,000002 %
Cr	0,000002 %
Cu	0,000002 %
Fe	0,00001 %
Mg	0,00001 %
Mn	0,000002 %
Ni	0,000002 %
Pb	0,00001 %