

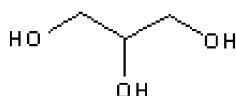


**PRODUCT CODE: 142329**

**Glycerol 87% (BP, Ph. Eur.) pure, pharma grade**

C<sub>3</sub>H<sub>8</sub>O<sub>3</sub>

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M.= 92,10

CAS [56-81-5]

EINECS 200-289-5

TARIC 2905 45 00 00

**SYNONYMS:** 1,2,3,-Propanetriol, Glycerol•

**PHYSICAL DATA:** liquid, Clear, viscous, Colourless, Thermal decom. above 130 °C • Miscible with water • D 20/4 1,23 • M.P.: -10 °C • B.P.: 130 °C 1.000 hPa • pH(100 g/l)5 • Flash P.:~177 °C • Ign. T.:~429 °C • Viscosity 20 °C 136 mPa.s • Dielec. constant20 °C 42,5 • Heat evap. 130 °C 826 KJ/Kg •

**BIBLIOGRAPHY:** Merck Index **12**, 4.493 13, 4.497 Sax **GGA000** • Safety **2**, **1782 D** • Römp **8**, **1512** • Kühn-Birett **G 4** • Ullmann **(5.)12**, 477 • Beilstein **1**, **502 I**, **266 II**, **575 III**, **2297 IV**, **2751** • BRN 635685 • ACS **X198** • BP. **2014** • Ph. Eur. **7.0** (2013) **8.0** (2014) • F.C.C **IV176** • Directive 98/86/EC • Regulation (EU) n° 231/2012 BS 2621-5 •

**HAZARDOUS:** RTECS: MA 8050000 • LD50 oral mus 4.090 mg/kg • LD50 oral rat 12.600 mg/kg • LD50 ipr mus 8.700 mg/kg VLA-ED 10 mg/m3

**WEIGHT/VOLUME INFORMATION:** 1l~1,228 kg 1kg~0,814 l

### SPECIFICATIONS:

Assay (C <sub>3</sub> H <sub>8</sub> O <sub>3</sub> )	83,5-88,5 %
Identity :	
Identity according to Pharmacopoeias:	passes test
Refractive Index n <sub>20</sub> /D	1,449-1,455

### Maximum limit of impurities

Appearance of solution	passes test
Acidity or alkalinity	passes test
Insoluble matter in H <sub>2</sub> O	passes test
Darkened substances by H <sub>2</sub> SO <sub>4</sub>	passes test
Residue on ignition (as SO <sub>4</sub> )	0,01 %
Sugars	passes test
Chloride (Cl)	0,001%
Ammonium (NH <sub>4</sub> )	0,001%
Sulfate (SO <sub>4</sub> )	0,002%
Halogenated compounds (as Cl)	0,003%

Residual solvents (Ph.Eur.)	passes test
Aldehydes (as CH <sub>2</sub> O)	0,001%
Diethyleneglycol and related substances	passes test
Esters	passes test
Water (H <sub>2</sub> O)	12,0-16,0 %
Heavy metals (as Pb)	0,0005%
<b>Residual metals ICP: (according to EMA/CHMP/SWP/4446/2000)</b>	
<b>Class 1A (Pt, Pd)</b>	<b>10 ppm</b>
<b>Class 1B (Ir, Rh, Ru, Os)</b>	<b>10 ppm</b>
<b>Class 1C (Mo, Ni, Cr, V)</b>	<b>25 ppm</b>
<b>Class 2 (Cu, Mn)</b>	<b>250 ppm</b>
<b>Class 3 (Fe, Zn)</b>	<b>1.300 ppm</b>
As	0,00015 %
Pb	0,0005 %

**DOES NOT COME FROM ANIMAL ORIGIN.**