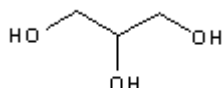


**PRODUCT CODE: 142329**

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

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

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



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. constant 20 °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 **XI** • BP.**2021** • Ph. Eur. **9.0** (2017) **10.0** (2020) • 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/m<sup>3</sup>

**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> )	85,0-88,0 %
Identity :	
Identity according to Pharmacopoeias:	passes test
Density at 20/4	1,224 - 1,232
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)	0,0001%
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)	12-14 %
Heavy metals (as Pb)	0,0001%

Elemental impurities (ICH Q3D):

Class 1	
Cd	0,5 ppm
Pb	0,5 ppm
As	1,5 ppm
Hg	1,5 ppm
Class 2A	
Co	5 ppm
V	10 ppm
Ni	20 ppm
Class 2B	
Tl	0,8 ppm
Au	10 ppm
Pd	10 ppm
Ir	10 ppm
Os	10 ppm
Rh	10 ppm
Ru	10 ppm
Se	15 ppm
Ag	15 ppm
Pt	10 ppm
Class 3	
Li	55 ppm
Sb	120 ppm
Ba	140 ppm
Mo	25 ppm
Cu	250 ppm
Sn	600 ppm
Cr	25 ppm

**GLYCERINE OF VEGETABLE ORIGIN**