



>>Entry Name: Glycerol, INN

ENTRY UNDER REVIEW

Synonym(s): 1,2,3-Propanetriol, 9CI. Glycerin, JAN, USAN. Glyceritol. Amylac. Baby lax. Bulboid. Cristal. Dagalax. Glyrol. Luxoral. Meprolax. Osmoglyn. E422. FEMA 2525. Many other names

CAS Registry Number: 56-81-5

Related CAS Registry Numbers(s): 6990-26-7 18673-08-0 28959-04-8 36887-04-4 51432-61-2 69790-27-8 117591-83-0 117591-84-1

$\text{HOCH}_2\text{CH}(\text{OH})\text{CH}_2\text{OH}$

Molecular Formula: $\text{C}_3\text{H}_8\text{O}_3$

Molecular Weight: 92.094

Accurate Mass: 92.047345

Percentage Composition: C 39.13%; H 8.76%; O 52.12%

Biological Source: Found extensively in esterified form in animal and plant glycerides. Obt. on large scale by alkaline hydrol. of fats during soap manuf. and by other routes

Use/Importance: Humectant, emollient and solvent, used in cosmetics and pharmaceutical products, foods, tobacco processing and extensively in numerous industrial and domestic prods. Component of alkyd resins and polyurethanes. Mild laxative, diuretic. Used for detn. of B; photometric detn. of Co

Physical Description: Syrup with sweet taste

Melting Point: Mp 17.8°

Boiling Point: Bp 290° part. dec.. Bp₂₀ 182°

Solubility: Misc. H₂O, EtOH; insol. C₆H₆, CHCl₃, CCl₄

Density: d₁₅¹⁵ 1.265

pKa Value: pK_{a1} 14.4

Refractive Index: n_D²⁰ 1.4720

Other Data: V. hygroscopic. Steam-volatile

Hazard & Toxicity: Fl. p. 160°, autoignition temp. 370/393°. Reacts violently or explosively with many oxid. agents. OES: long-term 10 mg m⁻³ (mist). Skin and eye irritant. Ingestion can cause headache and vomiting. Exp. reprod. effects

Aldrich: W25250-6

Fluka: 49769

Sigma: G7757

Supelco: 4-6922

>>Derivative: Bi salt

Synonym(s): Bismutural

CAS Registry Number: 17140-54-4

Biological Use/Importance: Oral antiseptic

>>Derivative: Complex with aluminium hydroxide

Synonym(s): Glucalox, INN. Glycalox, BAN. Manalox AG

CAS Registry Number: 12182-48-8

Use/Importance: Antacid

>>Derivative: 1-Phosphate

>>Derivative: 2-Phosphate

>>Derivative: 1-O-β-D-Glucopyranoside

>>Derivative: 3-O-β-D-Glucopyranoside

>>Derivative: 1-Ac