

SPECIFICATION

Product Name: Glycerine IP Grade
Chemical Formula: C ₃ H ₈ O ₃
CAS Number: 56-81-5
Molecular Weight: 92.09 g/mol
Appearance: Clear and colourless syrupy liquid
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification	-	(B) R.I : 1.4738 (C) Relative density: 1.2600	(B) R. I @ 20°C 1.470 to 1.475 (C) Relative density @20°C 1.258 to 1.268
Appearance of solution	-	Complies	The solution A is clear & diluted solution A is colourless.
Acidity	-	0.03ml of 0.1 M NaOH consumed.	NMT 0.2 ml of 0.1 M NaOH required.
Heavy metals	PPM	Complies	NMT 5 PPM as pb
Chlorides	PPM	3.18	NMT 10 PPM
Aldehydes	PPM	Passes the test	NMT 10 PPM
Esters	-	9.20ml of 0.1M HCL consumed	NLT 8ml. of 0.1M HCL required to decolourise the soln.
Halogenated compounds	PPM	Complies	NMT 35 PPM
Ethylene glycol, diethylene glycol and related substances (By DC)	%	0.00 0.00 0.0311, 0.279, 0.0068, 0.0093, 0.0242, 0.0325, 0.0621, 0.0372 0.2312	1. Ethylene glycol= NMT 0.10% 2. Diethylene glycol= NMT 0.10% 3. Any other secondary peak= NMT 0.10% 4. Total impurities= NMT 0.10%
Sugars	-	Passes the test	The solution remains blue and no precipitate is produced.

Sulphated Ash	%	0.0078%	NMT 0.01%
Water	%	0.13%	NMT 2.0%
Assay on anhydrous basis	%	99.57%	NLT 98.0% & NMT 101.0%

Physical Properties

- Solubility: Soluble in water. Soluble in ethanol. Insoluble in ether. Soluble in chloroform. Soluble in acetone. Soluble in fixed and volatile oils.

Shelf Life & Storage

- Shelf Life: 4 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a cool, dry, and well-ventilated place at 15–30°C. Keep the container tightly closed to prevent moisture absorption and contamination, as glycerine is hygroscopic. Protect from direct sunlight and excessive heat, and store in the original, properly labeled container to maintain product quality and stability.

Applications

- Use: Widely used as a humectant, solvent, plasticizer, sweetening agent, lubricant, and viscosity-enhancing agent in pharmaceutical, nutraceutical, cosmetic, and personal care formulations. It helps retain moisture, improve texture, enhance product stability, dissolve active ingredients, and improve palatability.
- Dosage: Depends on the intended pharmaceutical formulation and therapeutic application.

Packaging

- Standard Packing: 250 Liter HDPE Drum or as per customer requirement.
- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

* Specifications are based on the manufacturer's provided specifications.