

SPECIFICATION

Product Name: Glycerol Monostearate Powder 40%
Chemical Formula: C ₂₁ H ₄₂ O ₄
CAS Number: 31566-31-1
Molecular Weight: 358.56 g/mol
Appearance: White Powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Iodine Value (gI ₂ /100g)	g	Complies	Max. 3.0
Acid Value	mg/gm	Complies	Max. 3.0
Saponification value	mg/gm	161.28	145 – 170
Total monoglyceride	%	Complies	> = 40%
Free glycerol	%	Complies	Max. 2.0%
Moisture	%	0.8	<=0.5%
Melting unit	-	Complies	63 - 75

Physical Properties

- Solubility: Insoluble in water. Slightly soluble in alcohol. Freely soluble in oils and fats. Soluble in chloroform, ether, and acetone in organic solvents.

Shelf Life & Storage

- Shelf Life: 2 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a well-closed, airtight container. Keep in a cool and dry place. Protect from moisture and humidity. Keep away from direct sunlight and heat sources. Store in a clean, well-ventilated area.

Applications

- Use: Helps mix oil and water in creams, lotions, and ointments. Acts as a lubricant and binder. Used in controlled drug delivery formulations. Improves consistency and shelf life of formulations. Used in bakery, dairy, and processed foods. Enhances softness in bread and baked goods. Extends shelf life of bakery products. Used in whipped products. Gives creams and lotions a smooth texture. Provides a soft, smooth feel on skin. Prevents separation in cosmetic formulations.
- Dosage: Depends on desired emulsification strength. Product type (O/W or W/O system). Regulatory limits (IP/BP/USP or food regulations).

Packaging

- Standard Packing: 25 kg woven PP bags with inner liner 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.