



ELVISC – GSM™ (Glycerol Monostearate (GMS))

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	White to off-white waxy flakes or powder
Physical Form	Powder
Odor	Faint odor
Molecular Weight (g/mol)	358.6
Density or Specific Gravity	0.97
Refractive Index	1.4400 (estimate)
Density	0.97
Thermal Properties	
Melting Point	78-81 °C
Boiling Point	410.96°C (rough estimate)

2. Processing Methods



Cosmetic cream

Incorporate GMS into the oil phase and heat to fully melt and disperse it. This ensures proper emulsification and consistency in the final product. For more stable emulsions, pair GMS with co-emulsifiers like stearyl alcohol, stearic acid, or PEG derivatives to improve emulsion stability and skin feel.

Key Ingredients	Indicative Dosage (% w/w)
White Vaseline	30%
Stearyl Alcohol	10%
Sodium Lauryl Sulfate	1%
Glycerol Monostearate	2%
Propylene Glycol	10%
Methyl Paraben	0.2%
Citric Acid	0.04%
Hydrocortisone butyrate propionate	0.1%
Purified Water	Balance (~46.66%)

Cosmetic sunscreen cream

Include GMS in the oil phase and heat to around 70-75°C during emulsification. Ensure it is fully melted before combining with the aqueous phase to form a stable emulsion.

Key Ingredients	Indicative Dosage (% w/w)
Benzophenone-3	10%
Ethylhexyl Methoxycinnamate	5%
Titanium Dioxide	5%
Cetearyl Alcohol	3.5%
Glycerol Monostearate	3.5%
Ceteareth-25	1%
Isopropyl Palmitate	1.5%
Caprylic/Capric Triglyceride	1.5%
Polyethylene Glycol (PEG-40)	1%
Ethyl Paraben	0.5%
Deionized Water	67.5%



Hair conditioners

Incorporate GMS into the oil phase and heat to around 70-75°C to ensure it melts completely and blends uniformly during emulsification. Use alongside cationic surfactants and fatty alcohols to boost conditioning, slip, and detangling performance.

Key Ingredients	Indicative Dosage (% w/w)
Sodium-DL-2-pyrrolidone-5-carboxylate (50% soln)	5%
Glycerin	5%
Protein (e.g. hydrolyzed)	2.5%
Cetrimonium Chloride	4.3%
Glycerol Monostearate	1%
Promulgen D	1%
Mineral Oil	2%
Isopropyl Myristate	2%
Cetyl Alcohol	3.5%
Ethylene Glycol Monostearate	2%
Perfume	0.4%
Preservative	0.2%
Water (to 100%)	~71.1%



Lip Balm

Add GMS to the oil phase (with waxes, butters, and oils) and heat until fully melted and uniform before pouring into molds or containers. GMS adds a silky finish and forms a light protective barrier, improving moisture retention and overall lip feel without making the balm waxy or heavy.

Key Ingredients	Indicative Dosage (% w/w)
Vitamin A	1.0%
Hydrocortisone acetate	0.05%
Ethanol	2.0%
Glycerol	10.0%
Mannitol	3.0%
Propylene glycol	3.0%
Carbomer 934	0.3%
Potassium hydroxide	0.1%
Methyl paraben	0.1%
Cetanol	2.5%
Vaseline (petrolatum)	2.0%
Squalane	10.0%
Isopropyl myristate	5.0%
Glycerol Monostearate	2.0%
POE-25 cetyl ether	2.0%
Purified water	Balance (~57.95%)

3. Dosing by Application

Products	Authorized dosage %
Cosmetics (Creams, Lotions, Sunscreen)	1.5-2.5%
Ointments (Pharma, Personal Care)	2-5%

The information and data contained herein are believed to be accurate but may not be all inclusive and should only be used as a guide. The information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the product for his particular use and on condition that they assume the risk of the use thereof.

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