



ELHUME - ODO™ (Octane-1,2-diol)

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	Light yellow liquid; White Solid
Physical Form	Liquid
Molecular Weight (g/mol)	146.23
Density or Specific Gravity	0.914
Refractive Index	1.4505 (estimate)
Relative density	0.914
Chemical Properties	
Water Solubility	7.5 g/L (20 °C)
Incompatibilities	Avoid strong acids and strong alkalis
Hazardous Reactions	Stable; no hazardous polymerization
Thermal Properties	
Melting Point	36-38 °C (lit.)
Boiling Point	131-132 °C/10 mmHg (lit.)
Flash Point	>230 °F

2. Processing Methods



Cosmetic cream

Add Caprylyl Glycol during the cool-down phase to preserve its antimicrobial and moisturizing properties. Ensure it is well blended to support preservation efficacy and maintain cream stability.

Key Ingredients	Indicative Dosage (% w/w)
Emollients	5-20%
Emulsifiers	2-6%
Humectants (e.g., glycerin)	2-8%
1,2-Hexanediol	0.5-5%
1,2-Pentanediol	0.5-5%
Caprylyl Glycol	0.5-2%
Sorbic Acid	0.05-0.2%
Water	40-50%

Hair shampoo

Add Caprylyl Glycol during the cool-down phase to retain its preservative-boosting and moisturizing benefits. Mix thoroughly to ensure uniform distribution without destabilizing the formulation.

Key Ingredients	Indicative Dosage (% w/w)
Primary surfactants	8-12%
Secondary surfactants	2-5%
Butters	20-40%
Caprylyl Glycol	0.5-2%
Phenoxyethanol	0.3-1%
Water	30-40%



Facial cleansers

In facial cleanser formulations, add Caprylyl Glycol during the final mixing phase to retain its antimicrobial and moisturizing properties. It is oil-soluble, so ensure uniform dispersion, especially in surfactant-based systems. Maintain a pH range of 4.5-7 for best stability and efficacy.

Key Ingredients	Indicative Dosage (% w/w)
Glycerin	5%
Caprylyl/Capryl Glucoside	10%
Cocamidopropyl Betaine	5%
Decyl Glucoside	5%
Caprylyl Glycol	1%
Phenoxyethanol	0.8%
Deionized Water	70-80%

Sunscreen cream

When formulating with Caprylyl Glycol in sunscreen cream, add it during the cool-down phase to preserve its integrity and function. It's oil-soluble, so ensure proper emulsification in the system. Maintain pH between 4.5-7 for optimal stability and performance.

Key Ingredients	Indicative Dosage (% w/w)
Potassium Cetyl Phosphate	2%
C12-15 alkyl benzoate	6%
Caprylic/Capric Triglyceride, Glyceryl Oleate Citrate	6%
Octocrylene	10%
Homosalate	8%
Butyl Methoxydibenzoylmethane	5%
4-Methylbenzylidene Camphor	4%
Simmondsia Chinensis seed oil	5%
Glyceryl Stearate	3%
Apalight SP	5%
Aqua	44.8%
Tetrasodium glutamate diacetate	0.1%
Hydroxyethyl Acrylate and Sodium Acryloyl Dimethyl Taurate Copolymer	0.5%
Caprylyl Glycol	0.5%



3. Dosing by Application

Products	Authorized dosage %
Skin Care	0.5-2%
Hair shampoo	0.5-2%
Other Personal Care	0.5-2%

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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