



ELUVSAFE - OCL™ (Octocrylene)

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	Yellow viscous liquid
Physical Form	Liquid
Molecular Weight (g/mol)	361.5
Density or Specific Gravity	1.051 g/mL at 25 °C (lit.)
Refractive Index	n _{20/D} 1.567(lit.)
Thermal Properties	
Melting Point	-10°C (lit.)
Boiling Point	218 °C/1.5 mmHg (lit.)
Flash Point	>230 °F
Decomposition Temperature	>300°C
Chemical Properties	
Incompatibilities	Stable; avoid strong oxidizers and strong acids

2. Processing Methods



Cosmetic sunscreen cream

When adding Octocrylene in sunscreen, incorporate it into the oil phase and heat gently for full solubilization. Ensure compatibility with emulsifiers and other actives for a stable formulation. Mix thoroughly during emulsification to achieve uniform dispersion and optimal SPF performance.

Key Ingredients	Indicative Dosage (% w/w)
Avobenzone	3%
Octocrylene	5%
Isopropyl Myristate	4%
Shea Butter	3%
Cetyl Alcohol	2%
Water	~61%
Glycerine	4%
Xanthan Gum	0.5%

Lip balm

In lip balm production, incorporate Octocrylene into the oil phase by adding it during the melting stage to ensure uniform dispersion. Ensure compatibility with waxes and oils, and avoid overheating to prevent degradation.

Key Ingredients	Indicative Dosage (% w/w)
Pure hydrocortisone powder	0.2-3%
Pure beeswax	20-28%
Petroleum jelly	40-50%
Mineral oil	10-22%
Octocrylene	4-6%



Makeup foundation

In foundation formulation, add Octocrylene to the oil phase and heat it gently to fully dissolve and blend with other oil-soluble ingredients. Ensure even distribution before emulsification to provide consistent UV protection and formulation stability.

Key Ingredients	Indicative Dosage (% w/w)
Octocrylene	3-7%
Avobenzene	1-5%
Octinoxate	5-10%
Dimethicone	1-10%
Butylene Glycol	1-10%
C12-15 Alkyl Benzoate	0.5-5%
Styrene/Acrylates Copolymer	0.5-5%
Dicaprylyl Carbonate	0.5-5%
Glycerin	0.5-5%
Ceteareth-25	0.1-5%
Water	20-30%



Sunscreen Lotion

In sunscreen lotion formulation, add Octocrylene to the oil phase and heat to ensure full solubilization with other UV filters and emollients.

Key Ingredients	Indicative Dosage (% w/w)
Octocrylene	10%
Homosalate	10%
Octisalate	5%
Avobenzone	3%
Water (Aqua)	51.5%
Cyclopentasiloxane	13%
Glycerin	2%
Stearic Acid	1%
Triethanolamine	0.5%
Tocopherol (Vitamin E)	0.5%
Disodium EDTA	0.2%
Phenoxyethanol	0.3%
Fragrance	0.5%

3. Dosing by Application

Products	Authorized dosage %
Sunscreen Lotions, Creams	Upto 10%
Skin Care Creams, Lotions	Upto 10%
Lip stick	Upto 10%
Hair Care Products - UV Protection Hair Mask, Conditioners	Upto 10%

4. Grade Comparison Summary

Parameter	Cosmetic Grade
Purity (%)	≥98.5%
Appearance	Clear to pale yellow oily liquid
Odor	Mild, neutral
Water Solubility	Insoluble



Parameter	Cosmetic Grade
Photostability	Excellent
Regulatory Compliance	FDA, INCI, EU
Typical Applications	OTC sunscreens, daily SPF moisturizers

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.

EXPLORE ELCHEMY'S PRODUCT PORTFOLIO

[ELUVSAFE - OCL™ \(Octocrylene\)](#) | [Browse Catalog](#) | [Connect with us](#)