



ELACTAVIA – MCryS f™ (Menthol Crystals)

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	Colorless to white solid; crystals; needle-like crystals
Physical Form	Crystals
Odor	Mentholic
Molecular Weight (g/mol)	156.27
Density or Specific Gravity	0.89 g/mL at 25 °C (lit.)
Refractive Index	1.46
Density	0.89 g/mL at 25 °C (lit.)
Chemical Properties	
Water Solubility	Insoluble
Thermal Properties	
Melting Point	41-45 °C (lit.)
Boiling Point	212 °C (lit.)
Flash Point	200 °F
Solvent Solubility	
Water	<0.1%
Ethanol	Freely soluble
Methanol	Freely soluble
Isopropanol	Freely soluble
Acetone	Soluble
Glycerin	Insoluble

2. Processing Methods



Cosmetic cream

Dissolve menthol crystals in a suitable oil or alcohol before adding to the cream. Incorporate during the cool-down phase to prevent volatilization and maintain its cooling effect.

Key Ingredients	Indicative Dosage (% w/w)
Water (Purified)	65-80%
Stearic Acid	4%
Cetyl Alcohol	3%
Glycerin	5%
Mineral Oil	7%
Menthol Crystals	0.50%
Glyceryl Monostearate	3%
Triethanolamine (TEA)	1%
Preservative (e.g., Phenoxyethanol)	0.5%
Fragrance	0.5%
Dimethicone	5%
Tocopherol (Vitamin E)	0.5%

Lip balm

Melt menthol crystals directly into the oil phase during lip balm production at low heat to ensure full dissolution. Add just before pouring to preserve menthol's cooling effect and minimize evaporation.

Key Ingredients	Indicative Dosage (% w/w)
Beeswax	20%
Cocoa Butter	15%
Shea Butter	10%
Babassu Oil	15%
Castor Oil	9%
Rice Bran Oil	29%
Menthol Crystals	1%
Peppermint Essential Oil	1%



Hair shampoo

Dissolve menthol crystals in a suitable solvent before adding to the shampoo base to ensure uniform distribution. Add during the cool-down phase to maintain menthol's cooling effect and prevent volatility.

Key Ingredients	Indicative Dosage (% w/w)
Water (Aqua)	60-70%
Sodium Laureth Sulfate (SLES, 28%)	20%
Cocamidopropyl Betaine	10%
Glycerin	3%
Menthol Crystals	0.3%
Polyquaternium-10	0.5%
Panthenol (Pro-Vitamin B5)	1%
Preservative (e.g., Phenoxyethanol)	0.8%
Fragrance, Citric Acid	

Soap

Dissolve menthol crystals in a small amount of warm oil or alcohol before adding them to the soap formulation to ensure even distribution. Add during the cool-down phase to prevent evaporation and preserve the cooling effect.

Key Ingredients	Indicative Dosage (% w/w)
Olive Oil	25%
Coconut Oil	20%
Castor Oil	5%
Shea Butter	10%
Sweet Almond Oil	15%
Menthol Crystals	2%
Sodium Hydroxide (Lye)	15%
Distilled Water	15%
Fragrance, Citric Acid	

3. Dosing by Application

Products	Authorized dosage %
Creams, ointments, balms, and lotions	0.2-2%
Lip stick, lip balm	0.2-2%



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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