



ELACTAVIA - HYA™ (Hyaluronic Acid)

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	White powder; fine granules; available as solution or gel in formulations
Physical Form	Powder
Odor	Odorless
Molecular Weight (g/mol)	403.31
pH (if aqueous solution)	5.0-8.5
Chemical Properties	
pKa	3-4
Water Solubility	5 mg/mL
Incompatibilities	Strong oxidizers, strong acids/bases, heavy metal salts
Thermal Properties	
Melting Point	241-247°C
Boiling Point	1274.4 ± 65.0°C
Decomposition Temperature	Decomposes above 200°C
Solvent	
Water	Up to 4%
Glycerine	~1-2%
Ethanol	Poorly soluble
Methanol	Poorly soluble
Acetone	Insoluble
Oils	Insoluble

2. Processing Methods



Cosmetic sunscreen cream

Add hyaluronic acid to the water phase at low temperatures to preserve its structure and hydration properties. Use a compatible thickener or stabilizer to maintain uniform dispersion and enhance skin feel without affecting emulsion stability.

Key Ingredients	Indicative Dosage (% w/w)
Sunflower Oil	25%
Beeswax	15%
Candelilla Wax	5%
Shea Butter	10%
Coconut Oil	15%
Jojoba Oil	5%
Hyaluronic Acid (1%)	1%
Vitamin E Acetate1	1%
Tocopherol	0.5%
Deionized Water	21%
Fragrance (optional)	0.5%

Hair Shampoo

Add hyaluronic acid to the cool-down phase of shampoo production to prevent degradation and to ensure it is well-dispersed in the aqueous phase. Avoid high temperatures and harsh surfactants to maintain stability. Mix gently but thoroughly to ensure even distribution without foaming issues.

Key Ingredients	Indicative Dosage (% w/w)
Primary Surfactants	8-12%
Secondary Surfactants	2-8%
Foaming Agents	3-8%
Hyaluronic Acid	0.1-0.5%
Water	60-80%
pH adjusters, Fragrances, Preservatives, Conditioning Emollients etc.	



Lip Balm

Use encapsulated or anhydrous forms of hyaluronic acid to maintain stability in the oil-based lip balm matrix. Ensure even dispersion and compatibility with waxes and oils to avoid grittiness or phase separation.

Key Ingredients	Indicative Dosage (% w/w)
Oils/Emollients	40-60%
Butters	20-40%
Waxes	15-25%
Hyaluronic Acid	0.1-0.5%
Humectants, Antioxidants, Fragrance/Flavor, Other Actives etc.	

Makeup Foundation

In makeup foundation formulation, dissolve Hyaluronic Acid in the aqueous phase, ideally hydrating it fully before emulsification to prevent clumping. Add it during the cool-down phase to preserve its moisturizing properties.

Key Ingredients	Indicative Dosage (% w/w)
Water (Aqua)	50%
Cyclopentasiloxane	10%
Dimethicone	5%
Glycerin	3%
Hyaluronic Acid	2%
Butylene Glycol	2%
Sodium Chloride	0.5%
Titanium Dioxide	5%
Iron Oxides	5%
Phenoxyethanol	0.8%
Ethylhexylglycerin	0.2%
Fragrance	

3. Dosing by Application

Products	Authorized dosage %
Sunscreen Lotions, Creams	0.1-2%
Cosmetics lip balms	0.1-0.5%
Hair Product shampoos	0.1-0.5%



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.

EXPLORE ELCHEMY'S PRODUCT PORTFOLIO

[ELACTAVIA - HYA™ \(Hyaluronic Acid\)](#) | [Browse Catalog](#) | [Connect with us](#)