



ELVISC – MDX G1™ (Maltodextrin)

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	White or cream-colored amorphous or free-flowing powder
Physical Form	Powder
Odor	Odorless
Molecular Weight (g/mol)	162.1
Density or Specific Gravity	1.81 g/cm ³
Refractive Index	1.673
Density	1.81 g/cm ³
Chemical Properties	
Incompatibilities	Strong oxidizing agents.
Thermal Properties	
Melting Point	240 °C
Solvent	
Water	Fully soluble
Ethanol	<1% (insoluble)
Acetone	<1% (insoluble)
Chloroform	<1% (insoluble)

2. Processing Methods



Cosmetic cream

To avoid lump formation, pre-mix Maltodextrin with a portion of warm water before adding it into the main batch. Stir well to ensure smooth dispersion.

Key Ingredients	Indicative Dosage (% w/w)
Deionized Water (Aqua)	75.0%
Glycerin	5.0%
Maltodextrin	5.0%
Propylene Glycol	3.0%
Butyrospermum Parkii (Shea) Butter	4.0%
Cetearyl Alcohol	2.0%
Glyceryl Stearate	2.0%
Caprylic/Capric Triglyceride	2.0%
Tocopherol (Vitamin E)	0.5%
Carbomer 940	0.2%
Triethanolamine	0.3%
Phenoxyethanol	0.8%
Fragrance	0.5%

Shampoo

Incorporate Maltodextrin into the water phase at room temperature or warm under moderate stirring to ensure full dispersion and prevent clumping. Always use an appropriate preservative system and maintain pH between 4.5 and 6.5 for product stability.

Key Ingredients	Indicative Dosage (% w/w)
Water (Aqua)	35-70%
Sodium Laureth Sulfate or Ether Sulfate	15-60%
Cocamidopropyl Betaine or Sarcosinate or Betaines	5-20%
Saccharide (e.g., maltodextrin, corn syrup, or fructose syrup)	10-70%
Preservative (e.g., benzisothiazolinone or methylisothiazolinone)	0.1-1%
Perfume/Fragrance	0.2-1%
pH adjuster (e.g., citric acid)	q.s. to pH ~5-7



Hair conditioners

Disperse Maltodextrin into the aqueous phase under moderate stirring to ensure full dissolution and avoid graininess in the final product. Enhance performance by blending with cationic surfactants and emollients.

Key Ingredients	Indicative Dosage (% w/w)
Zea mays (Corn) Starch	35-55%
Maltodextrin	~2-3%
Behentrimonium Methosulfate	5-15%
Cetyl/Stearyl Alcohol	5-15%
Optional Fatty Acid/Salt (e.g., Stearic Acid)	0.1-20%
Additives (Fragrance, Color)	Balance

3. Dosing by Application

Products	Authorized dosage %
Moisturizing creams & lotions	5-30%
Shampoos & conditioners	5-30%

4. Grade Comparison Summary

Parameter	Food Grade
Purity (% Carbohydrate Solids)	≥95
Color	White to off-white
Physical Form	Spray-dried powder
Regulatory Compliance	FDA GRAS, FCC compliant
Common Applications	Beverages, dairy, confections

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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