



ELAROMA - GreenTeaExtract™ (Green Tea Extract)

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	Light brown to yellow powder
Physical Form	Light brown to yellow powder
Odor	Characteristic, mild, herbal-green aroma
Molecular Weight	458.4 g/mol (EGCG)
Density / Specific Gravity	0.5-0.7 g/cm ³ (bulk powder)
Refractive Index	1.435 to 1.460 @ 20°C (for a liquid extract)
pH (aqueous solution)	4.4
Assay / Purity	Standardized extracts typically contain ≥95% polyphenols and 50% EGCG.
Chemical Properties	
Ionic Nature	Non-ionic
Incompatibilities	Strong oxidizing agents, strong acids, strong bases.
Hazardous Reactions / Decomposition Products	Thermal decomposition can lead to the release of irritating gases and vapors such as carbon oxides.
Thermal Properties	
Melting Point	218°C (EGCG)
Boiling Point	Decomposes before boiling
Flash Point	>100°C (>212°F)
Thermal Stability	Stable under recommended storage conditions. Catechins are sensitive to heat and light and can degrade at high temperatures (e.g., 98°C).
Solubility	
Solubility in Water	Soluble / Fully miscible
Solubility in Ethanol	Soluble

2. Processing Methods



Antioxidant Facial Serum

A lightweight, water-based serum designed to provide antioxidant protection.

Key Ingredients	Indicative Dosage (% w/w)
Deionized Water	q.s. to 100
Glycerin	5.00
Propanediol	4.00
Green Tea Leaf Extract	2.00
Sodium Hyaluronate	1.00
Xanthan Gum	0.30
Phenoxyethanol	0.80
Ethylhexylglycerin	0.20

Green Tea Fortified Beverage

A ready-to-drink beverage formulation.

Key Ingredients	Indicative Dosage (% w/w)
Filtered Water	q.s. to 100
Cane Sugar	8.00
Citric Acid	0.30
Natural Lemon Flavor	0.25
Green Tea Extract (50% Polyphenols)	0.10
Ascorbic Acid (Vitamin C)	0.05
Potassium Sorbate	0.02

3. Dosing by Application

Application	Recommended / Max Dosage
Nutraceuticals (Dietary Supplements)	250-500 mg per day. The European Food Safety Authority (EFSA) advises that daily intake of EGCG from supplements should not exceed 800 mg.
Food & Beverages	0.20% to 0.40% (for flavor applications)
Cosmetics (General)	0.5% - 5%
Cosmetics (Facial Serums)	2% - 5%
Cosmetics (Creams / Lotions)	1% - 3%



Application	Recommended / Max Dosage
Cosmetics (Toners / Mists)	0.5% - 2%
Cosmetics (Eye Creams)	0.5% - 1%

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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