



ELVISC - GG G1™ (Guar Gum)

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	Yellowish-white, free-flowing powder
Physical Form	Yellowish-white, free-flowing powder
Odor	Odorless
Molecular Weight	200,000 to 300,000 Daltons
Density / Specific Gravity	0.8-1.0 g/mL at 25 °C
Viscosity	A 1% solution can range from 2,000-7,000 mPa.s (cps) depending on the specific grade and measurement conditions.
pH (1% aqueous solution)	5.5 - 7.5
Assay / Purity	Galactomannan: 80% Min.
Chemical Properties	
pKa	5-7
Ionic Nature	Non-ionic
Incompatibilities	Strong acids and alkalis in high concentrations can cause hydrolysis and loss of viscosity. Divalent and trivalent ions (e.g., Ca^{2+} , Al^{3+}) can cause viscosity changes or gel formation.
Hazardous Reactions / Decomposition Products	Decomposes upon prolonged heating.
Thermal Properties	
Melting Point	Does not have a specific melting point as it is a polysaccharide and decomposes upon heating.
Decomposition Temperature	Typically begins to decompose around 200°C to 250°C.
Thermal Stability	Stable up to 80°C (176°F) for five minutes. Degrades at extreme pH and temperature (e.g., pH 3 at 50°C).
Solubility	
Solubility in Water	Readily soluble in cold and hot water.
Solubility in Ethanol	Insoluble
Solubility in Methanol	Insoluble



Property	Specification
Solubility in Acetone	Insoluble
Solubility in Chloroform	Insoluble

2. Processing Methods

Vegan Mayonnaise

A creamy, plant-based alternative to traditional mayonnaise. Guar gum provides thickening and stabilization.

Key Ingredients	Indicative Dosage (% w/w)
Avocado Oil	1/2 glass
Apple Vinegar	1/4 glass
Guar Gum	1 tablespoon
Himalayan Pink Salt	A pinch (optional)
Thyme	1 teaspoon (optional)
Sugar-free Almond Drink	1/2 glass

3. Dosing by Application

Application	Recommended / Max Dosage
General Food Products	0.1% to 1.0%
Beverages	2 g to 10 g per L
Baked Goods	0.1% to 1.0%
Sauces and Dressings	0.1% to 1.0%
Ice Cream / Dairy Products	0.1% to 1.0%
Instant Noodles	0.3% to 0.5%
Cheese Products	Up to 3% of total weight

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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