



PRODUCT DATA SHEET

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PDS for High Acyl Gellan Gum

Low Protein Reactive & Enzyme-Free

CAGGEL™ ND403

Description

CAGGEL™ ND403 is a premium high acyl (HA) gellan gum produced by aerobic fermentation of a pure culture of *Sphingomonas elodea*. It represents an advanced technological grade that combines two critical performance attributes into a single product: Very Low Protein Reactivity and Enzyme-Free.

It is ideally suited for high-calcium milk, high-protein milk, and all neutral pH dairy products, including chocolate milk, protein-fortified milks, and ready-to-drink (RTD) dairy beverages.

Features

- ◆ Very Low protein reactive, suitable for elevated protein content (5.0% and above).
- ◆ Enzyme-Free: Prevents enzymatic reactions with casein that cause bitterness and off-flavors.
- ◆ Dual Protection: Combines physical stability (no sedimentation) with flavor stability (no bitterness/off-notes).
- ◆ High Calcium Tolerance: Optimized for calcium-fortified milk systems.

Dispersion

To disperse the product without lumps :

- ◆ Premix the powder with the other dry ingredients, and pour the preparation into the liquid under efficient stirring. Continue stirring to obtain a complete dispersion.
- ◆ or, disperse it in a non-solvent medium (oil or others).

Dissolution

The dissolution of the product depends on the medium and the process: it is improved by heat treatment (time, temperature), shear stress (stirrer, homogenizer). A complete dissolution can be rapidly obtained at around 85-90°C for 10-15min.

Ingredients:

Gellan Gum (E-418)

CAS: 71010-52-1

For use as a stabilizer and thickener

Regulation

This product conforms to many legislative standards. However, we recommend that the user ensures that this product is in compliance with the local regulations in force, particularly in the

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country where the product is to be consumed.

Quality Assurance

- ◆ Manufactured according to FSSC 22000, also approved for Kosher and Halal

Packaging, storage and shelf life

The product is packed in 25Kg/Drum with propylene bag inner or according to customer's specific request. Store away from heat and moisture, preferably at a temperature below 25°C (77°F) and at about 65% relative humidity. The product, when stored in these conditions and in its original unopened packaging, will maintain its initial properties for at least 24 months.

Regulatory information:

The product comply with GB2760、GB25535-2010、FCC V and FAO/WHO.

Specification

Items	Specification
Appearance	White to off- white powder
Content	85~108%
Assay (CO ₂ Yielding)	3.3-6.8%
Particle size (Pass 60 mesh)	Not less than 95%
Total nitrogen	Not more than 3%
Powder Color	Not less than 70%
Loss on drying	Not more than 10.0%
Gel strength	Not less than 650g/cm ²
Protein reaction testing (Acidified milk with 3% Protein)	Pass (No Flocculation or Precipitation)
Neutral milk testing	Pass (No Off-Flavor, No Bitterness)
pH value	5.5~8.0
Residue of IPA	Not more than 750mg/kg
Total heavy metals	Not more than 20mg/kg
Lead	Not more than 2mg/kg
Mercury	Not more than 1mg/kg
Arsenic	Not more than 2mg/kg
Cadmium	Not more than 1mg/kg
Total bacterial	Not more than 10,000cfu/g
Yeast & Mold	Not more than 400cfu/g
<i>E. Coli</i>	Negative in 5g
<i>Salmonella</i>	Negative in 25g