



PRODUCT DATA SHEET

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Beef Original Gelatin

INS 428 | E 441 | CAS 9000-70-8

CAG-Beef Gelatin

1. PRODUCT DESCRIPTION

CAG-Beef Gelatin is a high-quality, food-grade protein derived exclusively from bovine sources (cattle hides and bones). It is produced through controlled alkaline hydrolysis of collagen, resulting in Type B gelatin with an isoelectric point of pH 4.8–5.2.

Gelatin appears as a light yellow to pale yellow, free-flowing powder or granular material with neutral odor and taste. It dissolves in hot water (>40°C) and forms thermally reversible elastic gels upon cooling.

The gel melts at approximately 28–35°C, providing the characteristic “melt-in-the-mouth” texture widely valued in confectionery, desserts, and dairy systems.

Source: Bovine (cattle hides and bones)

Type: B (Alkaline processed)

Gel Type: Thermoreversible protein gel

Bloom Range: 150–250 g (various grades available)

2. KEY FEATURES & BENEFITS

- ◆ 100% Bovine Source – Suitable for non-porcine applications
- ◆ Type B Gelatin – Excellent compatibility in mildly acidic systems
- ◆ Thermoreversible Gelation – Melts at body temperature (28–35°C)
- ◆ Clean Flavor Profile – Neutral taste, excellent flavor release
- ◆ High Transparency – Bright, clear gel formation
- ◆ Elastic Texture – Ideal chewiness for gummies & marshmallows
- ◆ Multiple Bloom Options – 150–250 Bloom available for texture control

3. TYPICAL APPLICATIONS

Application	Dosage	Functional Benefit
Gummy Candies	2.0–5.0%	Elastic chewiness; clarity; shape retention
Marshmallows	1.5–2.5%	Foam stabilization; soft elasticity
Dairy Desserts (Pudding, Mousse)	0.3–1.2%	Smooth texture; structure stabilization
Meat Aspics & Savory Gels	1.0–2.0%	Firm, clear gel formation
Cheesecakes & Frozen Desserts	0.5–1.0%	Improves sliceability; texture stability
Capsule Shells	As required	Flexible, strong film-forming

Application	Dosage	Functional Benefit
Glazes & Coatings	1.0–3.0%	Gloss; adhesion enhancement

4. PRODUCT SPECIFICATIONS

Parameter	Specification
Appearance	Light yellow to pale yellow powder/granule
Odor & Taste	Neutral, characteristic gelatin
Bloom Strength	150–250 g (grade dependent)
Viscosity (6.67%, 60°C)	≥ 2.5–4.5 mPa·s
Loss on Drying	≤ 14%
pH (1% solution)	4.5–6.5
Total Ash	≤ 2.0%
Sulfur Dioxide	≤ 50 mg/kg
Insoluble Matter	≤ 0.5%
Gelling Temperature	20–25°C
Melting Temperature	28–35°C
Heavy Metals	Complies with international standards
Microbiology	Complies with food safety standards

5. REGULATORY COMPLIANCE

CAG-Beef Gelatin complies with: JECFA (INS 428) • EU Regulation (E 441) • FDA GRAS

Certifications available:

ISO 9001 | ISO 22000 / FSSC 22000 | HACCP

Non-GMO

6. PACKAGING

Inner Packaging: Food-grade PE liner

Outer Packaging: Multilayer kraft paper bag or fiber drum

Net Weight: 25 kg / bag (standard)

Custom Packaging: Available upon request

7. STORAGE CONDITIONS & SHELF LIFE

Storage Conditions: Store in a cool, dry place away from moisture, strong odors, and direct sunlight. Temperature: < 25°C recommended, Relative Humidity: < 60%.

Shelf Life: 24 months from date of manufacture under recommended conditions

Transport: Protect from moisture and contamination

This product data sheet provides typical technical data for initial evaluation. Actual values may vary depending on Bloom grade and production batch. For customized specifications or formulation assistance, please contact our technical team.