



PRODUCT DATA SHEET

Document No.: PDS-ISAA-1
Effective Date: 15, Jan 2025

Instant Soluble Agar Agar

INS 406 | E 406 | CAS 9002-18-0

CAGARG™ INST

1. PRODUCT DESCRIPTION

CAGARG™ INST is a physically modified agar derived from red seaweeds of the genera *Gracilaria* and *Gelidium*.

Through advanced physical processing (e.g., spray-drying and controlled agglomeration), the product is designed for rapid dispersion and hydration at reduced temperatures.

Unlike conventional agar, it dissolves efficiently at lower temperatures and significantly reduces boiling time.

Appearance: white to light yellow fine powder

Taste & odor: neutral

2. KEY FEATURES & BENEFITS

Rapid solubility at 55–85°C (grade dependent)

More than 95% dissolution within 5–7 minutes more than

Excellent cold dispersion without lumping

Energy- and time-saving in processing

Clean-label (physically modified only)

Suitable for instant and industrial systems

3. TYPICAL APPLICATIONS

- ◆ Instant jelly & dessert mixes
- ◆ Bakery fillings & fruit preparations
- ◆ Dairy desserts
- ◆ Confectionery systems
- ◆ Beverage suspension systems

Typical usage level: 0.3–1.2%, depending on desired gel strength.

4. PRODUCT SPECIFICATIONS

Parameter	Specification
Appearance	White to light yellow fine powder
Solubility	Soluble at $\geq 55^{\circ}\text{C}$
Gel Strength (1.5%, 20°C)	400–900 g/cm ²
Moisture (LOD)	$\leq 15\%$

Parameter	Specification
Total Ash	≤ 5%
Acid Insoluble Ash	≤ 1.0%
pH (1.5% solution)	4.0 – 7.0
Particle Size	100% pass 80 mesh
Lead (Pb)	≤ 3 mg/kg
Arsenic (As)	≤ 3 mg/kg
Cadmium (Cd)	≤ 1 mg/kg
Mercury (Hg)	≤ 1 mg/kg
Total Plate Count	≤ 10,000 CFU/g
Yeast & Molds	≤ 500 CFU/g
E. coli	Negative in 25 g
Salmonella	Negative in 25 g

Full specification sheet available upon request.

5. REGULATORY COMPLIANCE

Compliant with international food standards: FAO/WHO (INS 406), EU Regulation for E 406, FCC (Food Chemicals Codex)

Available Certifications: ISO 9001 | HACCP | Halal | Kosher
Non-GMO, Allergen-Free, BSE/TSE-Free

6. PACKAGING

Standard Packaging: 25 kg kraft paper bag with PE liner

Optional: 20 kg cartons or as required

7. STORAGE CONDITIONS & SHELF LIFE

Storage Conditions: Store in a cool, dry place away from direct sunlight, heat sources, and strong odors. Temperature: < 25°C recommended (optimal 10-20°C), Relative Humidity: < 60%

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

Transport: Strictly prohibit transport with poisonous materials; protect from moisture and contamination

For detailed technical specifications or customized grades, please contact CAG for the formal Product Data Sheet (PDS).

** This product data sheet provides typical technical data for initial evaluation. Specifications are based on international standards for INS 428 / E 441. Actual values may vary depending on grade and production batch.**