

PRODUCT DATA SHEET

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Citrus High Methoxyl Pectin

INS 440 | E 440 | CAS 9000-69-5

CAGPEC™ CPS

1. PRODUCT DESCRIPTION

CAGPEC™ CPS Series is a premium Citrus High Methoxyl (HM) Pectin extracted from citrus peels (lemon, orange, lime). It is a natural hydrocolloid widely used in high-sugar fruit systems, confectionery, beverages, and acidified dairy drinks.

Citrus HM Pectin forms gels in systems with high soluble solids (>55%) and low pH (2.8–3.5).

Appearance: White to light yellow free-flowing powder

Solubility: Dispersible in hot water (70–85°C)

Gel Type: Non-thermoreversible, sugar-acid activated gel

Degree of Esterification: >50% (Typical 60–75%)

Galacturonic Acid: ≥ 65%

2. KEY FEATURES & BENEFITS

- ◆ Multiple Setting Types – Rapid Set / Medium / Slow Set
- ◆ High Gel Strength Options – Up to 160° USA-SAG
- ◆ Excellent Clarity – Bright, transparent gel structure
- ◆ Beverage Viscosity Grade – Controlled mouthfeel
- ◆ Protein Stability Grade – Optimized for acidified milk drinks
- ◆ Standardized Performance – Consistent batch-to-batch quality

3. TYPICAL APPLICATIONS

Application	Recommended Grade	Dosage	Functional Benefit
High Sugar Jam (60–65% SS)	CP100 / CP200	0.2–0.6%	Firm, spreadable gel; fruit suspension
Confectionery (Fruit Candy, Gums)	CP300 / CP800	0.8–1.5%	Clear, firm gel; premium texture
Juice & Beverages	CP700	0.01–0.5%	Viscosity control; pulp suspension
Yogurt Drink / Acidified Milk	CP1000	0.1–0.5%	Protein stabilization; whey control
Fruit Prep for Yogurt	CP100 / CP200	0.3–0.8%	Smooth texture; heat stable
Bakery Fillings	CP300 / CP800	0.3–0.8%	Bake-stable gel; reduced syneresis

4. PRODUCT SPECIFICATIONS

Parameter	Specification
Appearance	White to light yellow powder

Parameter	Specification
Odor & Taste	Neutral, characteristic pectin
Galacturonic Acid	≥ 65%
Degree of Esterification	> 50%
Gel Strength	150 ± 5° or 160 ± 7° (grade dependent)
Viscosity (CP700)	400–600 cP (4% solution)
Loss on Drying	≤ 12%
Total Ash	≤ 5%
Acid Insoluble Ash	≤ 1%
pH (1% solution)	2.5 – 3.8
Sulfur Dioxide	≤ 50 mg/kg
Heavy Metals	Complies with international standards
Microbiology	Complies with food safety standards

Full technical specification sheet available upon request

5. REGULATORY COMPLIANCE

CAGPECT™ CPS complies with: • JECFA (INS 440)• EU Regulation (E 440)• FCC

• GB Standards

Certifications available:

ISO 9001 | ISO 22000 | HACCP | GMP

Halal | Kosher | Non-GMO | Allergen-Free | Vegan Suitable | BSE/TSE-Free

6. PACKAGING

Inner Packaging: Food-grade PE liner (50-80 µm thickness)

Outer Packaging: Multilayer kraft paper bag, plastic woven bag, or fiber drum

Net Weight: 25 kg / bag (standard), 20 kg / carton (for food service), 500 kg / jumbo bag (bulk orders)

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 data, samples, or customized grades, please contact CAG.

This product data sheet provides typical technical data and should be used for initial product evaluation. Specifications are based on international standards for E 440. Actual values may vary slightly depending on harvest season and production batch. For formulation support or custom grade requirements, please contact our technical team..