



# PRODUCT DATA SHEET

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## Konjac Refined Powder Series

425 (i) | CAS 37220-17-0

**CAGKG™ RPS**

### 1. PRODUCT DESCRIPTION

**CAGKG™ RPS** Konjac Refined Powder is a natural hydrocolloid derived from the tuber of *Amorphophallus konjac*. Its primary functional component is Konjac Glucomannan (KGM), a high-molecular-weight polysaccharide composed of glucose and mannose units linked by  $\beta$ -1,4 glycosidic bonds.

The product appears as an off-white to light brown free-flowing powder with a characteristic neutral to slightly marine odor. It is insoluble in organic solvents such as ethanol and oils.

This series serves as a cost-effective base-grade konjac powder suitable for a broad range of food applications where strong viscosity and water-binding capacity are required.

### 2. KEY FEATURES & BENEFITS

- ◆ Excellent water-binding capacity
- ◆ Cost-effective solution for general food processing
- ◆ High viscosity at low inclusion levels
- ◆ Forms thermally stable gels in the presence of mild alkali
- ◆ Strong synergistic performance with carrageenan and xanthan gum
- ◆ Natural source of soluble dietary fiber

### 3. TYPICAL APPLICATIONS

Application	Recommended Usage	Function
Noodles & Pasta	0.3% – 1.0%	Improves dough strength and elasticity
Meat Products (Sausages, Surimi)	0.3% – 1.5%	Water and fat binding, texture enhancement
Ice Cream & Frozen Desserts	0.2% – 0.5%	Ice crystal control, melt resistance
Jelly & Confections	0.5% – 1.5%	Elastic gel formation (with alkali)
Bakery Products	0.5% – 2.0%	Moisture retention, crumb softening
Sauces & Dressings	0.2% – 1.0%	Thickening and emulsion stabilization

### 4. PRODUCT SPECIFICATIONS

Parameter	Specification
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<b>Parameter</b>	<b>Specification</b>
Appearance	Off-white to light brown powder
Odor & Taste	Characteristic, neutral to slightly marine
Particle Size	≥ 90% through 80 mesh (180 μm)
Konjac Glucomannan (KGM)	≥ 70% (dry basis)
Viscosity (1%, 25°C)	15,000 – 30,000 mPa·s (grade dependent)
Loss on Drying	≤ 12%
Total Ash	≤ 5.0%
pH (1% solution)	5.0 – 7.0
Starch	Negative
Lead (Pb)	≤ 2.0 mg/kg
Arsenic (As)	≤ 2.0 mg/kg
Mercury (Hg)	≤ 1.0 mg/kg
Cadmium (Cd)	≤ 1.0 mg/kg
Total Plate Count	≤ 10,000 CFU/g
Yeast & Molds	≤ 300 CFU/g
Salmonella	Negative / 25 g
E. coli	Negative / 10 g

## 5. FOOD SAFETY & COMPLIANCE

Produced in facilities operating under HACCP principles, ISO 22000 / FSSC 22000 certified production site (if applicable), Complies with food additive regulations for Konjac (E425(i))

Meets FAO/WHO JECFA purity criteria

Suitable for global food applications subject to local regulations

Product Status: Non-GMO | Allergen Free | Vegan & Vegetarian Suitable | Gluten Free

## 6. PACKAGING

Inner Packaging: Food-grade PE liner

Outer Packaging: Multilayer kraft paper bag or fiber drum

Net Weight: 20 kg / 25 kg per bag (standard)

Custom Packaging: Available upon request

## 7. STORAGE CONDITIONS & SHELF LIFE

Storage Conditions: Store in a cool, dry place away from moisture 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

For detailed grade selection or formulation support, please contact CAG for a formal Product Data Sheet (PDS).