Soluble Soybean Polysaccharide Product Specification Sheet

1. Basic Information

- **Chinese Name**: 可溶性大豆多糖
- **English Name**: Soluble Soybean Polysaccharide（SSPS）
- **CAS No.**: 9034-32-6
- **INS No.**: —
- **CNS No.**: 20.044
- **UN No.**: None (Non-dangerous Goods)
- **Product Type**: Food Additive (Thickener, Emulsifier, Coating Agent, Anti-caking Agent), Water-soluble Dietary Fiber
- **Executive Standards**: GB 1886.322-2021 *National Food Safety Standard Food Additive Soluble Soybean Polysaccharide*, LS/T 3301-2005, JECFA, FCC
- **Production Process**: A powdered product made from soybean or soybean meal via degreasing, extraction, purification, sterilization, drying, sieving and other processes
- **Product Classification**:
  - Type A (Low Viscosity): Viscosity of 10% aqueous solution 10 ~ 30mPa・s (20±0.5℃)
  - Type B (Medium Viscosity): Viscosity of 10% aqueous solution 30 ~ 100mPa・s (20±0.5℃)

2. Appearance & Sensory Characteristics

- **Appearance**: White to pale yellow powder, no visible impurities to the naked eye, good fluidity
- **Odor & Taste**: Normal odor, no peculiar smell, no rancidity, no burnt flavor, no beany flavor
- **Solubility**: Soluble in cold water; aqueous solution is clear and transparent without precipitation or suspended matter
- **Viscosity Property**: Low viscosity and good fluidity; viscosity of 1% aqueous solution ＜50mPa・s with refreshing taste
- **Stability**: Acid-resistant (stable at pH 2 ~ 10), heat-resistant (no degradation at 121℃/30min), high salt-resistant; capable of stabilizing protein and preventing stratification and precipitation in acidic systems
- **Calorific Value**: Approximately 766kJ/100g, classified as low-calorie dietary fiber raw material

3. Physical & Chemical Specifications

Item	Standard Requirement
Soluble Polysaccharide Content (Dry Basis)	≥60.0% (HPLC)
Moisture	≤7.0%
Crude Protein (Dry Basis)	≤8.0%
Crude Ash (Dry Basis)	≤10.0%
Crude Fat	≤0.5%
Viscosity (10% Aqueous Solution, 20±0.5℃)	Type A: 10 ~ 30mPa・s; Type B: 30 ~ 100mPa・s
pH Value (1% Aqueous Solution)	5.5±1.0
Transparency (1% Aqueous Solution)	≥40%
Gelation Property (10% Aqueous Solution)	No gel formation after boiling and cooling to 4℃
Lead (Pb)	≤0.5mg/kg
Total Arsenic (As)	≤0.5mg/kg
Mercury (Hg)	≤0.1mg/kg
Cadmium (Cd)	≤0.2mg/kg

4. Microbiological Limits

Item	Standard Requirement
Total Aerobic Count	≤500CFU/g
Coliforms	≤30MPN/100g
Total Molds and Yeasts	≤50CFU/g
Salmonella	Not Detected / 25g
Staphylococcus Aureus	Not Detected / 25g
Shigella	Not Detected

5. Safety & Compliance

- **China Compliance**: Compliant with GB 1886.322-2021 food additive standard and permitted scope of use under GB 2760-2024
- **International Recognition**: Approved by JECFA evaluation, included in FCC standard, permitted as food additive in EU, Japan, South Korea, Australia, New Zealand and other regions
- **Safety Attribute**: Natural soybean source, no restricted population, no daily intake limit (use appropriately according to production requirements)
- **Label Declaration**: Mark **Soluble Soybean Polysaccharide**, product model (Type A / Type B), executive standard and production batch number

6. Packaging & Storage

- **Packaging**: 25kg per paper drum (lined with food-grade PE bag); customized 1kg, 5kg, 10kg bag/drum packaging available
- **Storage**: Store in sealed, cool, dry and ventilated place; temperature ≤25℃, relative humidity ≤65%, keep away from light, moisture and peculiar smell
- **Transportation**: Conventional transportation; protect from rain, moisture, sunlight and damage; strictly prohibit mixed transportation with toxic and harmful substances
- **Shelf Life**: 24 months under sealed storage

7. Applications

- **Beverages**: Acidic milk drinks, flavored fermented milk, protein drinks, fruit juice, carbonated drinks (stabilize protein and prevent precipitation)
- **Rice & Noodle Products**: Noodles, dumpling wrappers, rice, starch products (anti-sticking, anti-aging, improve taste)
- **Bakery Products**: Bread, cakes, biscuits (water retention, soft texture, extend shelf life)
- **Frozen Foods**: Ice cream, frozen rice and noodle products (anti-melting, stabilization, improve texture)
- **Condiments**: Salad dressing, sauces, soup bases (emulsification, thickening, system stabilization)
- **Functional Foods**: Dietary fiber supplements, meal replacements, health foods (supplement water-soluble dietary fiber)

8. Functional Properties

- **Protein Stabilization**: Efficiently protect milk protein and plant protein under acidic conditions to prevent aggregation and precipitation
- **Emulsification Synergy**: Synergize with emulsifiers to improve fat emulsification stability and inhibit oil-water separation
- **Low Viscosity & Refreshing Taste**: Viscosity is much lower than pectin and CMC, without affecting product taste and fluidity
- **Anti-caking & Anti-aging**: Prevent adhesion of rice and noodle products, inhibit starch retrogradation, improve rehydration and texture
- **Film-forming & Fresh-keeping**: Form a protective film on food surface to lock moisture, resist oxidation and extend fresh-keeping period
- **Dietary Fiber**: Water-soluble dietary fiber content ≥75%, regulate intestinal tract and promote probiotic proliferation

9. Quality Assurance

- Provide **COA (Certificate of Analysis)** for each batch
- Production complies with HACCP, ISO 22000, FSSC 22000 management systems
- Non-GMO, Halal and Kosher certifications are available
- Third-party inspection reports (SGS, CTI, CCIC) can be provided at any time

Soluble Soybean Polysaccharide Nutrition Facts Table

Basic Information

- Product Name: Soluble Soybean Polysaccharide (Type A / Type B)
- Product Specification: Food-grade powder, soluble polysaccharide ≥60.0%
- Executive Standards: GB 1886.322-2021, GB 28050-2011
- Usage Recommendation: Use appropriately according to production requirements (maximum dosage 10.0g/kg per GB 2760-2024)

Nutrition Facts (Per 100g)

Item	Per 100g	Nutrient Reference Value % (NRV%)
Energy	766kJ	9%
Protein	≤8.0g	≤13%
Fat	≤0.5g	≤1%
Carbohydrates	≥60.0g	≥20%
— Including: Soluble Soybean Polysaccharide	≥60.0g	—
Total Dietary Fiber	≥75.0g	300%+
Sodium	≤100mg	≤5%

Labeling Specifications

1. Nutrition Facts Table: Label strictly in accordance with GB 28050-2011; no modification to items, values and NRV%
2. Product Name: Mark **Soluble Soybean Polysaccharide**, model (Type A / Type B) and **Food Additive**
3. Compliance Statement: Mark **Compliant with GB 1886.322-2021 National Food Safety Standard**
4. Warning Information: No restricted population, no dosage limit warning (use appropriately per national standard)
5. Other Labeling: Production date, shelf life, storage conditions, manufacturer and batch number

Key Notes

1. NRV% Calculation: Calculated per GB 28050-2011 based on energy 8400kJ and dietary fiber 25g
2. Energy Coefficient: Calculated at 8kJ/g for dietary fiber; energy of 100g is about 766kJ
3. Carbohydrate Labeling: Soluble soybean polysaccharide is included in total carbohydrates, classified as dietary fiber without added sugar
4. Label Application: This specification sheet can be directly used for packaging design; export products shall be supplemented with compliance labeling requirements of destination countries