Artemisia Argyi Extract Specification Sheet

Product Definition

Artemisia Argyi Extract is a natural plant extract prepared from the dried aerial parts of *Artemisia argyi* H. Lév. & Vaniot (Compositae: Artemisia), through standardized processes including crushing, extraction, purification, and drying. It is mainly rich in active ingredients such as total flavonoids, chlorogenic acid, and eucalyptol.

I. Basic Product Information

- **Product Name**: Artemisia Argyi Extract
- **English Name**: Artemisia Argyi Extract
- **CAS No.**: 90575-84-7 (for total flavonoids), 327-97-9 (for chlorogenic acid)
- **Molecular Formula**: $C_{15}H_{10}O_7$ (for total flavonoids), $C_{16}H_{18}O_9$ (for chlorogenic acid)
- **Molecular Weight**: 302.24 (for total flavonoids), 354.32 (for chlorogenic acid)
- **Plant Source**: Dried aerial parts of *Artemisia argyi* H. Lév. & Vaniot (Compositae: Artemisia)
- **Extraction Part**: Dried aerial parts
- **Appearance & Characteristics**: Fine powder ranging from yellowish brown to dark brown, free of visible impurities to the naked eye, with a characteristic pungent aroma of Artemisia argyi and no peculiar odor.

II. Core Technical Specifications

- **Total Flavonoids Content**: ⩾1.0%~5.0% (calculated as rutin, dry basis, determined by UV spectrophotometry). Graded by quality level: Food Grade ⩾1.0%, Health Product Grade ⩾3.0%, Cosmetic Grade ⩾5.0%.
- **Chlorogenic Acid Content**: ⩾0.05%~1.0% (dry basis, determined by high-performance liquid chromatography). Graded by quality level: Food Grade ⩾0.05%, Health Product Grade ⩾0.5%, Cosmetic Grade ⩾1.0%.
- **Eucalyptol Content**: ⩾0.3%~1.5% (dry basis, determined by gas chromatography). Graded by quality level: Food Grade ⩾0.3%, Health Product Grade ⩾0.8%, Cosmetic Grade ⩾1.5%.
- **Moisture**: ⩽5.0%~8.0% (determined by drying method). Graded by quality level: Food Grade ⩽8.0%, Health Product Grade ⩽6.0%, Cosmetic Grade ⩽5.0%.
- **Ash Content**: ⩽3.0%~5.0% (determined by ignition residue method). Graded by quality level: Food Grade ⩽5.0%, Health Product Grade ⩽4.0%, Cosmetic Grade ⩽3.0%.
- **Acid-Insoluble Ash**: ⩽1.0% (determined by ignition residue method).
- **Heavy Metal Indicators**:
    - Total Heavy Metals: ⩽10.0 mg/kg
    - Lead (Pb): ⩽0.1~0.5 mg/kg. Graded by quality level: Food Grade ⩽0.5 mg/kg, Health Product Grade ⩽0.3 mg/kg, Cosmetic Grade ⩽0.1 mg/kg.
    - Arsenic (As): ⩽0.1~0.3 mg/kg. Graded by quality level: Food Grade ⩽0.3 mg/kg,

Health Product Grade ≤0.2 mg/kg, Cosmetic Grade ≤0.1 mg/kg.
    - Mercury (Hg): ≤0.01~0.1 mg/kg. Graded by quality level: Food Grade ≤0.1 mg/kg, Health Product Grade ≤0.05 mg/kg, Cosmetic Grade ≤0.01 mg/kg.
    - Cadmium (Cd): ≤0.01~0.1 mg/kg. Graded by quality level: Food Grade ≤0.1 mg/kg, Health Product Grade ≤0.05 mg/kg, Cosmetic Grade ≤0.01 mg/kg.
- **Pesticide Residues and Microbial Limits**:
    - Pesticide residue limits comply with the requirements for plant extracts specified in the *Chinese Pharmacopoeia* (2025 Edition), with testing methods referring to GB/T 23204.
    - Total Plate Count: ≤1000~10000 CFU/g. Graded by quality level: Food Grade ≤10000 CFU/g, Health Product Grade ≤5000 CFU/g, Cosmetic Grade ≤1000 CFU/g.
    - Molds and Yeasts: ≤10~100 CFU/g. Graded by quality level: Food Grade ≤100 CFU/g, Health Product Grade ≤50 CFU/g, Cosmetic Grade ≤10 CFU/g.
    - Coliforms: Food Grade ≤30 MPN/100g, Health Product Grade ≤10 MPN/100g, Cosmetic Grade: Not detected.
    - Salmonella: Not detected.
    - Staphylococcus aureus: Not detected.
- **Other Indicators**:
    - Particle Size: Passing through 80-mesh sieve ≥95% (determined by sieving method).
    - Solubility: Easily soluble in ethanol and water, partially soluble in acetone, insoluble in petroleum ether. Verified by visual inspection combined with solubility determination.
    - Solvent Residues: Ethanol residue ≤500 ppm (determined by gas chromatography).

III. Application Scope

- **Functional Foods**: Can be used as a raw material for antioxidant, anti-inflammatory, and immune-regulating dietary supplements, compressed tablets, solid beverages, functional drinks, etc.
- **Health Products**: Suitable as a raw material for health products approved for antioxidant, immune-enhancing, and blood lipid-regulating functions.
- **Cosmetics**: Used as a raw material for antioxidant, anti-inflammatory, soothing, and antibacterial skin care products, such as serums, creams, masks, and toners.
- **Pharmaceutical Intermediates**: Can be used as a raw material for traditional Chinese medicine compound preparations and antibacterial and anti-inflammatory drugs.

IV. Packaging Specifications

- Inner packaging: Food-grade aluminum foil bag; Outer packaging: Paper drum.
- Conventional specification: 25 kg/drum. Customized specifications (1 kg/bag, 5 kg/bag, 10 kg/bag, etc.) are available upon customer request.

V. Shelf Life

24 months (under sealed original packaging conditions).

VI. Storage Conditions

Sealed and stored in a cool, dry, and well-ventilated place, with temperature controlled below 30℃ and relative humidity ⩽60%. Avoid direct sunlight, high temperature, and high humidity, and keep away from oxidants and odorous substances.

VII. Transportation Method

Transportation under normal temperature conditions, avoiding rain, exposure to sunlight, heavy pressure, and severe collision. Compliance with general chemical transportation regulations; non-dangerous goods.

Remarks

Artemisia Argyi Extract complies with the following standards and specifications:

- China: ChP/GB
- International: WHO
- United States: USP/cGMP/FCC
- European Union: EP/EU FC
- Japan: JP FC

Artemisia Argyi Extract Nutritional Composition Table

Reference Basis

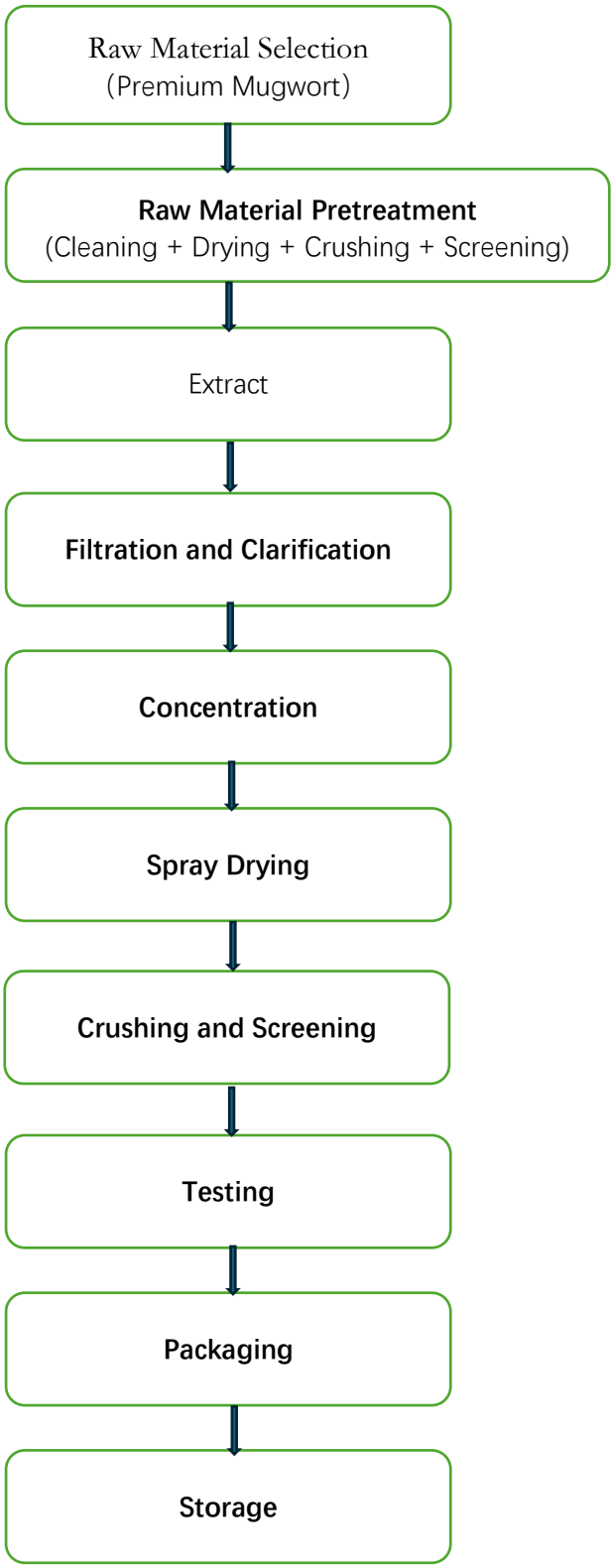
Per 100 grams (g) (taking the food-grade conventional product with total flavonoids ⩾1.0% and chlorogenic acid ⩾0.05% as an example).

Nutritional Component	Content	Nutrient Reference Value (%) (NRV%)
Energy	⩽2200 kJ	⩽26%
Protein	8.0~12.0 g	13%~20%
Fat	⩽1.0 g	⩽2%
Carbohydrate	55.0~65.0 g	18%~22%
Dietary Fiber	15.0~20.0 g	50%~67%
Sodium	⩽30 mg	⩽2%
Total Flavonoids (Functional Component)	⩾1.0 g	—
Chlorogenic Acid (Functional Component)	⩾0.05 g	—
Eucalyptol (Functional Component)	⩾0.3 g	—
Ash	⩽5.0 g	—
Moisture	⩽8.0 g	—

Remarks

- This nutritional composition table is compiled based on the testing data of the food-grade conventional Artemisia Argyi Extract. The content of functional components for different specifications (health product grade, cosmetic grade) is adjusted according to grade standards, with slight fluctuations in the content of basic nutrients.
- The "—" in the table indicates that there are no national specified nutrient reference values for these functional components.
- The contents of total flavonoids and chlorogenic acid may vary slightly depending on the origin of raw materials, planting season, and extraction process, with a fluctuation range of ⩽10%.
- Mineral contents (such as potassium, calcium, iron) can be supplemented and added to the table based on customer requirements after additional testing.

Artemisia Argyi Extract Production Process Flow Chart



Key Control Points of the Production Process

- **Raw Material Selection**: Select high-quality dried aerial parts of Artemisia argyi free from mildew, rot, pests, and impurities. Fix the supply of raw materials from core producing areas to ensure uniform raw material quality.
- **Cleaning & Drying**: Use low-temperature cleaning and strictly control the drying temperature (≤55℃) to avoid thermal decomposition of active ingredients and ensure the cleanliness of raw materials.
- **Alcohol-Water Extraction**: Precisely control the ethanol concentration (70%) and extraction temperature (55℃~60℃) to maximize the retention of active ingredients such as total flavonoids and chlorogenic acid and improve the extraction recovery rate (≥85%).
- **Spray Drying**: Precisely control the inlet air temperature (180℃~200℃) and outlet air temperature (80℃~90℃) to ensure the fluidity of the powder and the stability of active ingredients, and avoid caking.
- **Comprehensive Testing**: Conduct full-range testing for each batch of products before packaging and warehousing, covering all indicators including active ingredients, heavy metals, and microorganisms, to achieve quality traceability.