

Technical Data Sheet (TDS)

1. Product Overview

- Product Name: 乳香提取物
- English Name: Frankincense Extract
- CAS Number: 94524-60-4
- Formula: Boswellia carterii Resin Extract (Main component: C₃₀H₄₈O₃)
- Molecular Weight: 456.70 Da (Main boswellic acid)
- Product Characteristics: Natural plant extract derived from Boswellia carterii resin via ethanol extraction; standardized total boswellic acids content ≥65%; light yellow free-flowing fine powder with faint resinous fragrance; slightly soluble in water, soluble in ethanol/glycerin; excellent anti-inflammatory, soothing and antioxidant activity; stable under recommended storage conditions; compatible with most cosmetic/health care/pharmaceutical excipients; no artificial additives/preservatives.

2. Technical Specifications (Complies with Industrial Standards)

Item	Specification
Appearance	Light yellow to pale brown free-flowing fine powder
Total Boswellic Acids Content	≥ 65.0%
Loss on Drying	≤ 5.0%
Total Ash	≤ 6.0%
pH Value (1% aq. suspension, 25°C)	5.0-7.0
Heavy Metals (Pb)	≤ 5 ppm
Heavy Metals (As)	≤ 1 ppm
Total Aerobic Microorganisms	≤ 1000 CFU/g
Molds & Yeasts	≤ 100 CFU/g
E. coli	Negative
Particle Size	≥95% passing 80 mesh
Water Solubility	Slightly soluble in water; soluble in ethanol (1:10)
Bulk Density	0.45-0.65 g/cm ³
Temperature Stability	Stable at 0-40°C (boswellic acid retention ≥ 90%)
Storage Stability	24 months (unopened, ≤25°C, dry)
Odor	Faint natural resinous fragrance (unchangeable)

3. Product Advantages

1. **Standardized Active Component:** Total boswellic acids ≥65% with batch-to-batch consistency; complies with international plant extract standards (USP/EP); stable biological activity.
2. **Green Extraction Process:** Ethanol low-temperature extraction (no organic solvent residue); no artificial additives/preservatives/colorants; high purity and low impurity.
3. **Multi-Biological Activity:** Excellent anti-inflammatory, soothing and antioxidant effects; relieves joint discomfort; soothes skin redness/irritation; scavenges free radicals and delays aging.
4. **Good Formulability:** Soluble in ethanol/glycerin; compatible with all common cosmetic/health care excipients (maltodextrin, glycerin, plant oils); no precipitation in formulated products.
5. **High Safety:** GRAS certified; low heavy metal/pesticide residue; mild to skin (no irritation); non-hazardous for transport/storage; suitable for long-term use in controlled dosage.

4. Application Fields

- **Cosmetics:** Soothing/anti-inflammatory/anti-aging skin care products (serum, cream, mask, lotion); relieves sensitive skin redness/irritation; improves skin barrier; antioxidant ingredient for anti-aging products.
- **Health Care Products:** Joint health supplements (capsules, tablets, powder); anti-inflammatory dietary supplements; antioxidant products for middle-aged and elderly; oral care products (toothpaste, mouthwash).



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

- **Pharmaceuticals:** Anti-inflammatory pharmaceutical intermediates; raw material for peripheral analgesic drugs; adjuvant ingredient for joint disease treatment drugs.
- **Other Fields:** Natural resin flavor additive for daily chemicals; plant extract raw material for aromatherapy products (small dosage only).

5. Usage Methods

5.1 Formulation Compatibility

- **Cosmetics:** Mix with ethanol/glycerin first (1:10 ratio) then add to water-based/oil-based formulations; optimal addition pH 5.0-7.0; avoid high temperature (>60°C) during formulation.
- **Health Care Products:** Mix with maltodextrin/starch for solid dosage forms (capsules/tablets); dissolve in ethanol/glycerin for liquid dosage forms (oral liquid); compatible with honey/syrup for oral products.
- **Pharmaceuticals:** Use as intermediate for pharmaceutical synthesis; dissolve in organic solvent (ethanol/dimethyl sulfoxide) for drug formulation; follow GMP pharmaceutical formulation standards.

5.2 Recommended Dosage

- **Cosmetics:** 0.5-3.0% (w/w) (soothing/anti-inflammatory); 1.0-5.0% (w/w) (anti-aging/antioxidant).
- **Health Care Products:** 2.0-10.0% (w/w) of the total formulation; adult daily dosage 100-300 mg (as pure boswellic acids).
- **Pharmaceuticals:** 5.0-20.0% (w/w) (pharmaceutical intermediate); follow pharmaceutical formulation requirements for specific dosage.

5.3 Processing Precautions

- Operate in a well-ventilated low-dust area; avoid powder dispersion during formulation.
- Do not mix with strong oxidizing agents/concentrated acids; avoid high temperature (>60°C) and prolonged heating during processing.
- Control workshop humidity ≤70% to prevent product hygroscopy; seal the product container immediately after use.

6. Packaging & Storage

6.1 Packaging Specifications

- 1 kg/bag (food/cosmetic-grade aluminum foil bag, vacuum sealed)
- 5 kg/10 kg/drum (sealed HDPE drum with inner aluminum foil bag)
- 25 kg/drum (food/cosmetic-grade fiber drum with inner aluminum foil bag, vacuum sealed)
- Custom packaging (100g/500g) available for small-batch orders (per customer requirements)

6.2 Storage Conditions

- Store in a cool, dry, dark well-ventilated warehouse; keep container tightly sealed; avoid direct sunlight and high temperatures (storage temperature ≤ 25°C); control warehouse humidity ≤ 70%.
- Store separately from strong oxidizing agents, concentrated acids and high-temperature cargo; no mixing with other plant extracts unless formulated.
- Shelf Life: 24 months (unopened, under specified storage conditions); 6 months after opening (resealed, dry, cool storage).

7. Safety & Protection

- The product is non-hazardous in normal use; mild eye irritation only if direct contact; wear safety goggles/nitrile gloves during handling.
- Avoid direct eye contact; rinse eyes with plenty of water if contact occurs; consult a doctor if irritation persists.
- Wash hands thoroughly after handling; no eating/drinking/smoking in the handling area during operation.
- No special protective equipment required for normal low-dust handling; dust mask recommended for large-scale processing.

8. Quality Assurance

- The product is manufactured in accordance with ISO 9001 and GMP quality management system standards; green extraction process with no organic solvent residue.
- Each batch of product is tested by an independent third-party laboratory and accompanied by a Certificate of Analysis (COA) with full test results.