

Glabridin Document TDS, COA and MSDS from HiSiaddi

Note: "Guangcaoding" is a typo; the official standard name is Glabridin. This document contains general commercial TDS, COA templates, and MSDS complying with GB/T16483, applicable for customs declaration, cosmetic filing and foreign trade delivery.

Part 1 Technical Data Sheet (TDS)**1 Basic Product Information**

表格

Item	Parameter
Chinese Name	Glabridin
INCI Name	Glabridin
CAS No.	59870-68-7
Molecular Formula	C ₂₀ H ₂₀ O ₄
Molecular Weight	324.37
Full Chemical Name	(R)-4-(3,4-Dihydro-8,8-dimethyl-2H,8H-benzo[b]pyrano[3,2-g]pyran-3-yl)benzene-1,3-diol
Raw Material Source	Purified extraction from roots of Glycyrrhiza glabra
Appearance	≥95% High Purity: White to off-white crystalline powder; 80% Grade: Light brownish-yellow powder
Odor	Slight characteristic licorice odor, no peculiar smell
Melting Point	154–156°C
Flash Point	267.4°C
Solubility	Soluble in ethanol, propylene glycol, 1,3-butanediol, DMSO; slightly soluble in vegetable oils; practically insoluble in water
LogP	4.26 (High lipophilicity)
Storage Conditions	Sealed, light-proof, cool and dry environment (≤25°C); refrigeration at 2–8°C extends shelf life; protect from moisture and direct strong light
Shelf Life	24 months for unopened original packaging
Recommended Cosmetic Dosage	0.05%–0.1% (Limit specified in Safety Technical Specifications for Cosmetics)
Core Efficacy	Tyrosinase inhibitor, whitening & spot fading, antioxidant, anti-inflammatory, soothing, free radical scavenger

Item	Parameter
Application Scenarios	Whitening serums, creams, toners, masks, spot-lightening cosmetics, skincare oils, pharmaceutical intermediates
2 Commercial Purity Grades (Industry Standard)	
1. High Purity Grade A: ≥95% HPLC – High-end cosmetic lines, export filing	
2. Standard Grade B: ≥80% HPLC – Affordable mass-market skincare raw materials	
3. Reagent Grade: ≥98% HPLC – Laboratory and scientific research use	

3 Packaging Specifications
1g / 5g / 10g aluminum foil bags; 100g / 1kg vacuum aluminum cans; 25kg fiber drums lined with double PE bags

Part 2 Certificate of Analysis (COA) Template

Standard Basis: T/HPCIA 011—2024

Sample Information

Product Name: Glabridin

Batch No.: _____

Production Date: _____

Test Date: _____

Purity Grade: 95%

Testing Standard: T/HPCIA 011-2024, HPLC External Standard Method

表格

Test Item	Standard Requirement	Actual Result	Single Item Judgment	Test Method
Appearance	White crystalline powder		Visual Inspection	
Odor	No irritating odor		Olfactory Test	
Glabridin Content	≥95.0%		Qualified / Unqualified	HPLC, λ=292nm
Glabrol Impurity	≤1.0%		HPLC	
Loss on Drying (Moisture)	≤0.5%		Karl Fischer Titration	

Test Item	Standard Requirement	Actual Result	Single Item Judgment	Test Method
Residue on Ignition (Ash)	≤0.1%		Muffle furnace at 550℃	
Total Heavy Metal (Lead, Pb)	≤10 ppm		AAS Atomic Absorption Spectrometry	
Arsenic (As)	≤2 ppm		AAS	
Mercury (Hg)	≤1 ppm		AAS	
Cadmium (Cd)	≤5 ppm		AAS	
Methanol Residual Solvent	≤0.2%		GC Gas Chromatography	
Total Aerobic Microbes	≤100 CFU/g		Plate Count Method	
Mold & Yeast	≤10 CFU/g		Plate Count Method	
Pathogens (Pseudomonas aeruginosa / Staphylococcus aureus / Salmonella)	Not Detected		Microbial Culture	

Test Conclusion: All indicators of this batch sample comply with T/HPCIA 011—2024 Grade A Standard for Cosmetic-Grade Glabridin, approved for delivery.

Tester: _____ Auditor: _____ Enterprise Quality Inspection Seal

Part 3 Safety Data Sheet (SDS/MSDS)

Compliant with GB/T16483-2008 16-section standard

Section 1 Product & Supplier Identification

1.1 Product Name: Glabridin

1.2 CAS Number: 59870-68-7

1.3 Supplier Info: _____ (Manufacturer/trading company name, address, emergency contact number)

1.4 Product Usage: Whitening active raw material for cosmetics, laboratory reagent; forbidden for direct oral food addition

Section 2 Hazard Identification

- GHS Classification: No severe hazardous chemical classification; Environmental Hazard Category 4 (H413 Long-term harmful to aquatic life)
- Signal Word: Warning
- Hazard Statements:
 - H302 Harmful if swallowed
 - H312 Harmful in contact with skin
 - H332 Harmful if inhaled
 - H413 May cause long lasting harmful effects to aquatic life
- Precautionary Statements:
 - P261 Avoid breathing dust
 - P280 Wear dust mask, nitrile gloves, eye protection
 - P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell, drink warm water
 - P302+P352 IF ON SKIN: Wash with plenty of soap and water
 - P501 Dispose of contents/container via licensed hazardous waste handler; do not discharge directly into sewers, rivers or lakes

Section 3 Composition / Information on Ingredients

Pure Glabridin: 95%–98% content; no toxic organic solvent residues

Section 4 First-Aid Measures

- Inhalation: Remove victim to fresh air; seek medical attention if coughing or discomfort persists
- Skin Contact: Remove contaminated clothing, rinse skin thoroughly with soap and water for 15 minutes; consult physician for redness or itching
- Eye Contact: Rinse eyes continuously with running water for 10 minutes while holding eyelids open; seek ophthalmic care immediately
- Ingestion: Do NOT induce vomiting; give 200–300 mL warm water; seek emergency medical treatment, never feed unconscious persons

Section 5 Fire-Fighting Measures

- Suitable Extinguishing Media: Water mist, dry powder, carbon dioxide, alcohol-resistant foam; Do NOT use direct high-pressure water jets on powder
- Fire Hazards: Thermal decomposition generates carbon monoxide and irritating phenolic fumes

- Firefighter Protection: Wear positive-pressure self-contained breathing apparatus and full protective suit; operate upwind

Section 6 Accidental Release Measures

- Small Spill: Wear dust-proof protective gear, collect material with dry sand or lint-free paper into sealed waste drum; wash contaminated area with water
- Large Spill: Isolate spill site, contain material to prevent entry into drainage systems; fully recover spilled powder, avoid dust formation
- Environmental Control: Strictly prevent discharge into sewers, soil or water bodies

Section 7 Handling and Storage

- Handling: Operate in closed systems with workshop ventilation; no eating, drinking or smoking at workstations; wash hands thoroughly after operation
- Storage: Store sealed away from light below 25°C; separate from oxidants and strong acids

Section 8 Exposure Controls / Personal Protection

- Occupational Exposure Limit: No national standard limit; control workshop dust concentration below 1mg/m³
- PPE Required: KN95 dust mask, solvent-resistant nitrile gloves, safety goggles, dust-proof work uniform

Section 9 Physical and Chemical Properties

Appearance: White crystalline powder; Odor: Faint licorice scent; Melting Point: 154–156°C; Flash Point: 267.4°C; Practically insoluble in water; Stable under ambient temperature, no polymerization risk

Section 10 Stability and Reactivity

Chemically stable; Incompatible substances: Strong oxidants, concentrated strong acids; No hazardous polymerization reactions

Section 11 Toxicological Information

Acute oral LD50 (rat) >2000mg/kg; Low acute toxicity; Long-term dust inhalation may irritate respiratory tract; No confirmed carcinogenic data

Section 12 Ecological Information

Poor biodegradability; Chronic long-term toxicity to aquatic organisms; Direct discharge to water bodies is prohibited

Section 13 Disposal Considerations

Solid waste: Incinerate via licensed hazardous waste treatment companies as organic plant extract waste; Neutralize cleaning wastewater before discharge to meet emission standards

Section 14 Transport Information

UN Number: None (Non-hazardous goods)

Transport Classification: General chemical goods; No hazardous chemical control for sea, air or land shipment; Seal packaging to avoid light and moisture, prevent breakage

Section 15 Regulatory Information

Domestic Compliance: Safety Technical Specifications for Cosmetics (2022 Version), T/HPCIA 011-2024

Export Compliance: EU CosIng, REACH Annex IV permitted cosmetic raw material

Section 16 Other Information

Document Preparation Date: 2026; Compiled per GB/T16483, GB/T17519;

This SDS applies only to pure Glabridin powder

Supplementary Remarks

1. Stamped full PDF versions of TDS, COA and SDS must be obtained directly from manufacturers. The above templates can be filled with batch data and company seals for customs clearance and cosmetic filing.
2. English bilingual versions of TDS/SDS are available for EU exports to comply with REACH and CosIng audits.
3. COA indicators differ between 80% low-purity extracts and 95% high-purity products, along with corresponding SDS exposure limits; request matching documents before placing orders.

Do you need me to reorganize all content into printable pure Word segmented English text for foreign trade (Chinese-English bilingual version)?