Safety Data Sheet

PINHONBIO® trans-4-tert-Butylcyclohexanol

99% GC grade | SDS / MSDS | Version 1.1 | 21 Oct 2026

1 Identification

Product identifier	PINHONBIO® trans-4-tert-Butylcyclohexanol | 99% GC grade
Chemical identity	trans-4-tert-Butylcyclohexanol | CAS 21862-63-5
INCI name	4-T-BUTYLCYCLOHEXANOL
Recommended use	Raw material for professional cosmetic formulation, including soothing skin-care products. Not intended for direct consumer application or ingestion.
Supplier	Shaanxi Pinhon Biotechnology Co., Ltd.
Address	Room 704, Unit 2, Building 1, I-Duhui, No. 11 Tangyan South Road, Yanta District, Xi'an, Shaanxi, China
Contact	Albert Zhao | +86 173 0298 1616 | info@pinhoningredients.com | pinhoningredients.com
Emergency contact	Albert Zhao | +86 173 0298 1616 | 09:00–18:00 China Standard Time (UTC+8); business-hours contact. For urgent medical help, contact local emergency services.

2 Hazard identification

Classification: Not classified as hazardous based on the available substance information. Reference basis: Section 16.

Label elements: No hazard pictogram, signal word or hazard statement assigned under this classification.

Other hazards: Avoid airborne dust, eye contact and accidental ingestion. Finely divided organic material may present a dust fire hazard near ignition sources; explosibility has not been tested. Routine protection is required during bulk powder handling.

3 Composition and information on ingredients

Substance	CAS number	Grade specification
trans-4-tert-Butylcyclohexanol	21862-63-5	Purity ≥99.0% by GC; isomer impurity ≤1.0%.

Technical substance; no added carrier is specified. Molecular formula: $C_{10}H_{20}O$; molecular weight: 156.27 g/mol. GC purity is an analytical quality parameter, not a demonstrated as-supplied mass fraction. Loss on drying is separately controlled at ≤3.0%.

4 First aid measures

Inhalation: Move to fresh air. Obtain medical help if breathing discomfort or coughing persists. Skin: Wash with soap and water and remove contaminated clothing. Eyes: Rinse gently with water for several minutes; remove contact lenses if easy and continue rinsing. Seek advice for persistent discomfort. Ingestion: Rinse the mouth and obtain medical advice. Do not induce vomiting or give anything by mouth to an unconscious person.

Symptoms and treatment: Dust exposure may cause transient discomfort in the eyes or respiratory tract. No product-specific symptom profile or antidote is established. Treat symptomatically; provide this SDS to medical personnel.

5 Firefighting measures

Use water spray, foam, dry chemical or carbon dioxide as appropriate to the surrounding fire. Avoid a forceful water jet that disperses powder. Cool containers from a safe location.

The organic solid can burn under fire conditions. Smoke and carbon oxides may be generated. Firefighters should wear self-contained breathing apparatus and suitable protective clothing. Prevent contaminated firefighting runoff from entering drains.

6 Accidental release measures

Keep unnecessary personnel away and ventilate the area. Avoid dust formation; wear the equipment described in Section 8. Eliminate nearby ignition sources where this can be done safely.

Recover powder carefully into a closed, labelled container using a method that minimizes airborne dust. Use dust-compatible collection equipment; avoid compressed-air cleaning. Prevent discharge into drains, soil and surface water. Dispose of contaminated material as described in Section 13.

7 Handling and storage

Handling: Use local extraction at weighing and transfer points. Minimize dust and avoid breathing airborne particles. Prevent eye contact and prolonged skin contact. Wash hands after work; do not eat or drink in the handling area. Maintain clean equipment and control static discharge during bulk powder transfers.

Storage: Keep tightly closed in the original packaging at 2–25 °C, in a cool, dry place away from strong light, heat and ignition sources. Separate from strong oxidizing agents. Protect against moisture and contamination. Shelf life: 24 months in unopened packaging under these conditions.

8 Exposure controls and personal protection

Control parameters: No substance-specific occupational exposure limit was identified in the consulted SDS. Observe applicable local dust limits and assess workplace exposure; no numerical limit is assigned here.

Engineering controls	Provide local dust extraction, adequate ventilation and ready access to eyewash facilities.
Eye protection	Safety glasses with side shields; use enclosed goggles where airborne dust is generated.
Hand and body protection	Use suitable protective gloves and work clothing. Select glove material and change frequency for the actual exposure and any process solvents.
Respiratory protection	If ventilation cannot adequately control dust, use a certified particulate respirator selected for the exposure and local requirements; ensure correct fit.
Hygiene and environment	Remove contaminated clothing and wash before reuse. Keep powder and wash water out of drains and waterways.

9 Physical and chemical properties

Physical state / colour	White to off-white powder
Odour / odour threshold	Characteristic / threshold not determined
Melting range	79–81 °C (product specification)
Boiling point or range	Not determined for this grade
Flammability	Not determined; combustible organic material under fire conditions
Explosion limits / dust explosibility	Not determined
Flash point	Not determined
Autoignition / decomposition temperatures	Not determined
pH	Not determined; aqueous test conditions not established
Kinematic viscosity	Not applicable to the supplied solid
Solubility	Practically insoluble to insoluble in water; soluble in ethanol (FAO/JECFA reference [2]).
Partition coefficient n-octanol/water	Not determined for this grade
Vapour pressure / relative vapour density	Not determined
Density / relative density	Not determined
Particle characteristics	Powder; particle-size distribution not specified

Values identified as product specifications are standing limits, not batch results. Literature solubility describes the substance; formulation behaviour depends on test conditions.

10 Stability and reactivity

Stable under the recommended storage and handling conditions. No hazardous reaction is identified under routine use. Avoid strong oxidizing agents, excessive heat, open flames and dust accumulation. Fire or severe overheating may produce carbon monoxide, carbon dioxide and smoke.

11 Toxicological information

Exposure routes: Airborne powder inhalation, eye and skin contact, and accidental ingestion. Product-specific numerical acute toxicity values and test reports for skin or eye irritation, sensitization, mutagenicity, carcinogenicity, reproductive toxicity, target-organ toxicity and aspiration hazard were not supplied.

Endocrine-disrupting properties: No product-specific assessment available.

12 Ecological information

No product-specific quantitative data are available for aquatic toxicity, degradation, bioaccumulation or soil mobility. No product-specific PBT, vPvB or endocrine-disruption assessment has been provided. Prevent uncontrolled environmental release.

13 Disposal considerations

Collect residues and contaminated packaging in closed containers. Use an authorized waste contractor and follow applicable local requirements. Do not discharge into drains. Empty containers can retain powder; avoid dispersing residues during cleaning or disposal.

14 Transport information

ADR/RID / IMDG / IATA	Non-dangerous goods for transport, based on the reference SDS for CAS 21862-63-5 [1].
UN number / UN proper shipping name	Not assigned / not applicable
Transport hazard class / packing group	Not applicable / not applicable
Environmental transport hazards	No environmental transport hazard assigned in the reference assessment.
Special precautions	Use securely closed, moisture-protective packaging. Protect from heat and damage; apply the storage conditions in Section 7.
Maritime transport in bulk	Not evaluated; this sheet addresses packaged product.

15 Regulatory information

Prepared in a 16-section SDS format using the product specification and the public substance references listed below. The hazard assessment in Section 2 uses an EU CLP supplier reference; this sheet does not certify registration or inventory status in every destination market.

The importer and formulator should check the requirements applicable to the destination and intended use. A chemical safety assessment for the PINHONBIO grade has not been supplied. INCI identification alone does not establish permitted use levels or finished-product approval.

16 Other information

Issue date: 21 Oct 2026 | Version 1.1 | Revision: editorial update for customer distribution. General grade specifications are used; no batch-specific test results are included.

Compilation basis: PINHONBIO product specifications and the public references listed below. The classification in Section 2 follows reference [1] for trans-4-tert-butylcyclohexanol, CAS 21862-63-5. Review this SDS when new relevant safety information becomes available.

[1] TCI Europe, trans-4-tert-Butylcyclohexanol, B1271, SDS v1.1, 29 Jan 2025. https://www.tcichemicals.com/BE/en/sds/B1271_EU_6N.pdf

[2] FAO/JECFA, JECFA No. 2263, trans-4-tert-Butylcyclohexanol. https://www.fao.org/food/food-safety-quality/scientific-advice/jecfa/jecfa-flav/details/ru/c/2281/

[3] Fluorochem, F450306, SDS revision 1, 19 Dec 2024 (supplier-authored SDS hosted by Cymit). https://static.cymitquimica.com/products/10/pdf/sds-F450306.pdf

GC: gas chromatography; NMR: nuclear magnetic resonance; PBT/vPvB: persistent, bioaccumulative and toxic / very persistent and very bioaccumulative. Information describes safe handling of the identified material and is not a guarantee of suitability for every formulation or process.