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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product	OTBCHA / 2-tert-Butylcyclohexyl Acetate	**Revision date**	2026-11-16
Version	1.0	**Brand**	Richest

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product name	OTBCHA / 2-tert-Butylcyclohexyl Acetate
Synonyms	OTBCHA; 2-(tert-Butyl)cyclohexyl acetate; o-tert-Butylcyclohexyl acetate
CAS No.	88-41-5
EC No.	201-828-7
Molecular formula	C12H22O2
Molecular weight	198.30 g/mol
Relevant identified uses	Masking and perfuming applications listed by Parchem; intended-use suitability and final dosage require customer assessment.
Uses advised against	No specific uses advised against were identified in the reviewed sources.
Company	Richest Group
Address	No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
Telephone	0086 21 5017 5386
E-mail	inquiry@richest-group.com
Website	www.richest-group.com
Emergency telephone number	0086 21 5017 5386

SECTION 2: Hazards identification

GHS Classification	Acute toxicity, oral Category 4; Skin corrosion/irritation Category 2; Serious eye damage/eye irritation Category 2A; Specific target organ toxicity — single exposure Category 3, respiratory system; Specific target organ toxicity — repeated exposure Category 1; Hazardous to the aquatic environment, long-term hazard Category 2
Pictogram(s)	GHS07, GHS08, GHS09
Signal word	Danger
Hazard statement(s)	H302 Harmful if swallowed.; H315 Causes skin irritation.; H319 Causes serious eye irritation.; H335 May cause respiratory irritation.; H372 Causes damage to organs through prolonged or repeated exposure.; H411 Toxic to aquatic life with long lasting effects.
Precautionary statement(s)	P261 Avoid breathing dust/fume/gas/mist/vapours/spray.; P273 Avoid release to the environment.; P305+P351+P338 IF IN EYES: rinse cautiously with water for several minutes; remove contact lenses if present and easy to do; continue rinsing.
Other hazards	No other hazards were identified in the reviewed sources.

SECTION 3: Composition/information on ingredients

Component	OTBCHA / 2-tert-Butylcyclohexyl Acetate
CAS No.	88-41-5

SECTION 3: Composition/information on ingredients	
EC No.	201-828-7
Classification	Acute toxicity, oral Category 4; Skin corrosion/irritation Category 2; Serious eye damage/eye irritation Category 2A; Specific target organ toxicity — single exposure Category 3, respiratory system; Specific target organ toxicity — repeated exposure Category 1; Hazardous to the aquatic environment, long-term hazard Category 2
Concentration	≥98% (Z+E), Parchem public specification

SECTION 4: First-aid measures	
If inhaled	Move to fresh air; give artificial respiration if not breathing; consult a physician.
In case of skin contact	Remove contaminated clothing and shoes immediately; wash with soap and plenty of water; obtain medical attention.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician; continue rinsing during transport to hospital.
If swallowed	Do not induce vomiting; never give anything by mouth to an unconscious person; rinse mouth with water and consult a physician.
Most important symptoms and effects	No data available
Indication of immediate medical attention	No data available

SECTION 5: Fire-fighting measures	
Suitable extinguishing media	Alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	No data available
Special hazards arising from the chemical	Toxic fumes may form in combustion.
Advice for firefighters	Wear self-contained breathing apparatus and protective clothing to prevent skin and eye contact.

SECTION 6: Accidental release measures	
Personal precautions and emergency procedures	Wear respiratory and other suitable protection; avoid breathing vapours, mist, gas or dust; ensure adequate ventilation and evacuate personnel to safe areas.
Environmental precautions	Prevent further leakage if safe; do not let product enter drains or rivers.
Methods for containment and cleaning up	Mix with sand or vermiculite, sweep up and transfer to a closable labelled salvage container for appropriate disposal.

SECTION 7: Handling and storage	
Precautions for safe handling	Avoid skin and eye contact and formation of dust and aerosols; wash hands thoroughly after handling; ensure sufficient ventilation and use normal preventive fire protection.
Conditions for safe storage, including incompatibilities	Keep tightly closed in a cool, dry, well-ventilated place. Ambeed SDS specifies sealed, dry, room-temperature storage; reseal opened containers and keep upright.

SECTION 8: Exposure controls/personal protection	
Occupational exposure limit values	The PerfumersWorld pure Verdox SDS states that the product contains no substances with occupational exposure limit values.

SECTION 8: Exposure controls/personal protection

Biological limit values	No biological limit values were identified in the reviewed sources.
Appropriate engineering controls	Use good industrial hygiene and safety practice; wash hands before breaks and at the end of the workday.
Eye/face protection	Face shield and safety glasses meeting applicable NIOSH or EN 166 standards.
Skin and body protection	Inspect and use gloves with proper removal technique; use complete chemical-protective clothing selected for workplace concentration and amount.
Respiratory protection	Where risk assessment supports air-purifying respirators, the SDS lists full-face N100 (US) or P3 (EN 143) cartridges as backup to engineering controls; use a full-face supplied-air respirator if it is the sole protection.
Thermal hazards	No specific thermal hazards were identified in the reviewed sources; see Sections 5 and 10.

SECTION 9: Physical and chemical properties

Physical state	Colorless transparent liquid
Colour	Colourless to almost colourless clear liquid (TCI); PerfumersWorld lists a colourless to pale straw oily liquid.
Odour	No data available
Melting point / freezing point	No data available
Boiling point / boiling range	222.2 °C at 760 mmHg
Flammability	H227, combustible liquid (TCI).
Explosion / flammability limits	No data available
Flash point	91 °C (TCI); 90.8 °C in the ECHEMI public SDS.
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH	No data available
Viscosity	No data available
Solubility	Almost insoluble in water, poorly soluble in propylene glycol, and soluble in alcohol and oils (ChemicalBook public SDS).
Partition coefficient n-octanol/water	No data available
Vapour pressure	No data available
Density and/or relative density	No data available
Relative vapour density	No data available
Particle characteristics	Not applicable (liquid).
Other properties	Parchem specification values are listed separately.
Refractive index	No data available
Acid value	No data available

SECTION 10: Stability and reactivity

Reactivity	The pure Verdox SDS entry for reactivity is none.
Chemical stability	Stable under recommended storage conditions.

SECTION 10: Stability and reactivity

Possibility of hazardous reactions	No decomposition if stored and applied as directed; vapours may form an explosive mixture with air (PerfumersWorld pure Verdox SDS).
Conditions to avoid	Heat, flames and sparks. TCI recommends storage in a cool, dark place below 15 °C.
Incompatible materials	No data available
Hazardous decomposition products	Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

Additional information	The acute and chronic toxicity of this substance is not fully known according to the selected SDS.
Toxicological summary	The existing information was reviewed by the independent Expert Panel for Fragrance Safety and supports the use of 2-tert-butylcyclohexyl acetate as described in this fragrance ingredient safety assessment. Target data show that it is not genotoxic, provide a calculated Margin of Exposure (MOE) greater than 100 for the repeated dose toxicity and reproductive toxicity endpoints, and show that there are no safety concerns for skin sensitization under the current declared levels of use.
Acute toxicity	GHS acute-toxicity classification: Acute toxicity, oral Category 4; Skin corrosion/irritation Category 2; Serious eye damage/eye irritation Category 2A; Specific target organ toxicity — single exposure Category 3, respiratory system; Specific target organ toxicity — repeated exposure Category 1; Hazardous to the aquatic environment, long-term hazard Category 2; H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H372 Causes damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects.
Skin corrosion irritation	GHS classification: Acute toxicity, oral Category 4; Skin corrosion/irritation Category 2; Serious eye damage/eye irritation Category 2A; Specific target organ toxicity — single exposure Category 3, respiratory system; Specific target organ toxicity — repeated exposure Category 1; Hazardous to the aquatic environment, long-term hazard Category 2; H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H372 Causes damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects.
Serious eye damage irritation	GHS classification: Acute toxicity, oral Category 4; Skin corrosion/irritation Category 2; Serious eye damage/eye irritation Category 2A; Specific target organ toxicity — single exposure Category 3, respiratory system; Specific target organ toxicity — repeated exposure Category 1; Hazardous to the aquatic environment, long-term hazard Category 2; H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H372 Causes damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects.

SECTION 12: Ecological information

Environmental fate	The existing information was reviewed by the independent Expert Panel for Fragrance Safety and supports the use of 2-tert-butylcyclohexyl acetate as described in this fragrance ingredient safety assessment. It was not to be Persistent, Bioaccumulative, and Toxic (PBT) according to the International Fragrance Association (IFRA) Environmental Standards.

SECTION 12: Ecological information

Aquatic hazard classification	GHS aquatic-hazard classification: Acute toxicity, oral Category 4; Skin corrosion/irritation Category 2; Serious eye damage/eye irritation Category 2A; Specific target organ toxicity — single exposure Category 3, respiratory system; Specific target organ toxicity — repeated exposure Category 1; Hazardous to the aquatic environment, long-term hazard Category 2; H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H372 Causes damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

Product disposal methods	Consult state, local or national regulations and hand over to an authorised disposal company as hazardous waste.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with local regulations.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	3082
UN Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
Transport hazard class(es)	9
Packing group	III
Environmental hazards / Marine pollutant	Marine pollutant / pollutant according to the cited public SDS.
Special precautions for user	The SDS requires an EHS mark for single packagings and combination packagings with inner packagings containing dangerous goods above 5 L for liquids or 5 kg for solids, as specified in its ADR/IMDG reference.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	TSCA: ON the EPA Toxic Substances Control Act inventory.; California_Proposition_65: Not listed on California's listing of known or potential carcinogens.; chemical_safety_assessment: No Chemical Safety Assessment.

SECTION 16: Other information

Full text of H-Statements	H302 Harmful if swallowed.; H315 Causes skin irritation.; H319 Causes serious eye irritation.; H335 May cause respiratory irritation.; H372 Causes damage to organs through prolonged or repeated exposure.; H411 Toxic to aquatic life with long lasting effects.
Revision date	2026-11-16
Version	1.0

SECTION 16: Other information

References	Supplier technical documents, public SDS/COA/TDS and regulatory sources reviewed. Public data citations are listed below. Public data sources: 2-tert-Butylcyclohexyl acetate — PubChem CID 62334: https://pubchem.ncbi.nlm.nih.gov/compound/62334 | 2-tert-Butylcyclohexyl Acetate public specification: https://parchem.com/chemical-supplier-distributor/-api-get-pdf-2-tert-butyl-cyclohexyl-acetate-003589 | 2-t-Butylcyclohexyl Acetate product information: https://www.parchem.com/chemical-supplier-distributor/2-t-butylcyclohexyl-acetate-096466 | Safety Data Sheet A587312 — 2-(tert-Butyl)cyclohexyl acetate: https://www.chemblink.com/MSDSFiles/88-41-5Ambeed.pdf | 2-tert-Butylcyclohexyl Acetate, product B6830 — specifications, properties and safety: https://www.tcichemicals.com/SG/en/p/B6830 | O-tert-Butylcyclohexyl acetate — Safety Data Sheet, CAS 88-41-5: https://www.chemicalbook.com/msds/o-tert-butylcyclohexylacetate.htm | Verdox — Safety Data Sheet, CAS 88-41-5: https://www.echemi.com/sds/o-tert-butylcyclohexylacetate-pid_Rock25012.html | Verdox — pure substance SDS and technical documents: https://www.perfumersworld.com/document-list.php?pro_id=3FG00463 | Verdox — odour and technical specifications: https://www.perfumersworld.com/view.php?pro_id=3FG00463
Abbreviations	CAS: Chemical Abstracts Service; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; SDS: Safety Data Sheet.
Disclaimer	The information in this SDS applies to the specified product and is provided in good faith based on information available to Richest Group at the date of issue. It describes health, safety and environmental requirements and does not constitute a guarantee of product properties. Users must assess suitability and comply with applicable regulations.