

SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: PARA TERTIARY BUTYL CYCLOHEXANOL (PTBCH) 2000000000

Version: 1

Section 1. Identification of the substance or the mixture and of the supplier

1.1 Product Identifier

Product identifier: 4-tert-butylcyclohexanol; CAS: 98-52-2

Other identifiers: 2000000000 PARA TERTIARY BUTYL CYCLOHEXANOL (PTBCH)

1.2 Relevant identified uses of the substance of mixture and uses advised against

Product uses: **Ingredient for flavours and fragrances**

1.3 Details of the supplier of the safety data sheet

Company name: Eternis Fine Chemicals Ltd.

Company address: 1004, Peninsula Towers, 10 th Floor,
Peninsula Corporate Park, G.K. Marg,
Lower Parel, Mumbai-400013, India

Contact: Salomi Samuel

E-Mail address: sales@eternis.com

Company phone: +91-22-66513400

1.4 Emergency telephone number

Emergency phone: 011-352-323-3500 (Infotrac Contract No. - 102229)

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Classification under Regulation (EC) No 1272/2008

Class and category of danger: Eye Damage / Irritation Category 2
H319, Causes serious eye irritation.

2.2 Label elements

Classification under Regulation (EC) No 1272/2008

Signal word: Warning

Hazard statements: H319, Causes serious eye irritation.

M factor: None

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Product: PARA TERTIARY BUTYL CYCLOHEXANOL (PTBCH) 2000000000**Version:** 1**Supplemental Information:** None**Precautionary statements:** P280, Wear protective gloves/eye protection/face protection.
P305/351/338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337/313, If eye irritation persists: Get medical advice/attention.**Pictograms:****Other hazards:** None**Section 3. Composition / information on ingredients****3.1 Substances****Product identifier:** 4-tert-butylcyclohexanol; CAS: 98-52-2**Section 4. First-aid measures****4.1 Description of first aid measures**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

None expected, see Section 4.1 for further information.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable media: Carbon dioxide, Dry chemical, Foam.

5.2 Special hazards arising from the substance or mixture

In case of fire, may be liberated: Carbon monoxide, Unidentified organic compounds.

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5.3 Advice for fire fighters:

In case of insufficient ventilation, wear suitable respiratory equipment.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.

6.2 Environmental precautions:

Keep away from drains, surface and ground water, and soil.

6.3 Methods and material for containment and cleaning up:

Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Contain spillage immediately by use of sand or inert powder. Dispose of according to local regulations.

6.4 Reference to other sections:

Also refer to sections 8 and 13.

Section 7. Handling and storage

7.1 Precautions for safe handling:

Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use personal protective equipment as required. Use in accordance with good manufacturing and industrial hygiene practices. Use in areas with adequate ventilation. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

7.3 Specific end use(s):

Ingredient for flavours and fragrances: Use in accordance with good manufacturing and industrial hygiene practices.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits: Not Applicable

8.2 Exposure Controls

Eye/ Skin Protection

Wear protective gloves/eye protection/face protection

Respiratory Protection

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Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel: a) Increase ventilation of the area with local exhaust ventilation. b) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material.

Also refer to Sections 2 and 7.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	White flakes / clear colourless liquid
Odour:	Camphoraceous
Odour threshold:	Not determined
pH:	Not determined
Melting point/freezing point:	63 °C
Initial boiling point and boiling range:	226 °C
Flash point	>110 °C
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Upper/lower flammability or explosive limits:	Not determined
Vapour pressure:	0.0067 hPa @ 20°C
Vapour density:	Not determined
Relative density:	0.8720 g/cm ³ @ 20°C
Solubility(ies):	Water Solubility 247 mg/l @ 20°C
Partition coefficient: n-octanol/water:	3.06 log POW
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	10 cSt at 80 °C
Explosive properties:	None
Oxidising properties:	Not determined
9.2 Other information:	None

Section 10. Stability and reactivity

10.1 Reactivity:

Presents no significant reactivity hazard, by itself or in contact with water.

10.2 Chemical stability:

Good stability under normal storage conditions.

10.3 Possibility of hazardous reactions:



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Not expected under normal conditions of use.

10.4 Conditions to avoid:

Avoid extreme heat.

10.5 Incompatible materials:

Avoid contact with strong acids, alkalis or oxidising agents.

10.6 Hazardous decomposition products:

Not expected.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute Toxicity: Based on available data the classification criteria are not met.

Acute Toxicity Oral	LD50 (rat)	4200mg/kg
Acute Toxicity Dermal	LD50 (rabbit)	>5000mg/kg
Acute Toxicity Inhalation	Not available	

Skin corrosion/irritation: Based on available data the classification criteria are not met.

Skin irritation	Rabbit	not irritating
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Serious eye damage/irritation: Eye Irritant - Category 2A
Irritating

Respiratory or skin sensitisation :

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity: Based on available data the classification criteria are not met.

Carcinogenicity: No data available

Reproductive toxicity: No data available

STOT-single exposure: Based on available data the classification criteria are not met.

STOT-repeated exposure: Based on available data the classification criteria are not met.

Aspiration hazard: No data available

Refer to Section 2 for additional information.



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Section 12. Ecological information

12.1 Toxicity

Aquatic toxicity: Based on available data the classification criteria are not met.

LC50 (48 hrs)	Fish	17 mg/l
EC50 (46 hrs)	Daphnia	46 mg/l
LC50 (72 hrs)	Algae	29 mg/l

12.2 Persistence and degradability

Biodegradation: OECD Guideline 301 E Readily biodegradable

12.3 Bioaccumulative potential

Partition coefficient n-octanol /water (log Kow): Calculated 3.42

12.4 Mobility in soil

Adsorption coefficient:
 Log Koc Estimated 2.2228
 Koc Estimated 167 l/kg

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Other adverse effects

Not applicable

12.7 Additional information

None available

Section 13. Disposal considerations

13.1 Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be taken to an approved waste handling site for recycling or disposal.



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Section 14. Transport information

14.1 UN number: Not classified
14.2 UN Proper Shipping Name: Not classified
14.3 Transport hazard class(es): Not classified
Sub Risk: Not classified
14.4. Packing Group: Not classified
14.5 Environmental hazards: Not environmentally hazardous for transport
14.6 Special precautions for user: None additional
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
 Not classified

Section 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

None additional

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

Section 16. Other information

Key to revisions:

Not applicable

Key to abbreviations:

Not applicable

The information in this safety data sheet is to the best of our knowledge true and accurate but all data, instructions, recommendations and/or suggestions are made without guarantee.