



# 4-TERT-OCTYLPHENOL CAS NO 140-66-9

# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 **Product identifiers** 

> Product name 4-tert-Octylphenol

CAS-No. 140-66-9

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

: Laboratory chemicals, Industrial & for professional use only. Identified uses

1.3 Details of the supplier of the safety data sheet

> Company : Central Drug House (P) Ltd

7/28 Vardaan House New Delhi -110002

INDIA

+91 11 49404040 Telephone

Email care@cdhfinechemical.com

1.4 **Emergency telephone number** 

> : +91 11 49404040 (9:00am - 6:00 pm) [Office hours] Emergency Phone #

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008

Skin irritation (Category 2), H315

Serious eye damage (Category 1), H318 Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements

## Labelling according Regulation (EC) No 1272/2008

Pictogram

Danger

Signal word

Hazard statement(s)

Causes skin irritation. H315

H318 Causes serious eye damage.

H410 Very toxic to aquatic life with long lasting effects. Precautionary statement(s)

P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.

none

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Immediately

call a POISON CENTER/doctor.

P391 Collect spillage.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard

Statements

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms : 4-(1,1,3,3-Tetramethylbutyl)phenol

Formula : C<sub>14</sub>H<sub>22</sub>O

Molecular weight : 206.33 g/mol
CAS-No. : 140-66-9
EC-No. : 205-426-2
Index-No. : 604-075-00-6

## Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

**4-(1,1,3,3-Tetramethylbutyl)phenol** Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)

CAS-No. 140-66-9 Skin Irrit. 2; Eye Dam. 1; <= 100 %

EC-No. 205-426-2 Aquatic Acute 1; Aquatic Index-No. 604-075-00-6 Chronic 1; H315, H318, H400,

H410

M-Factor - Aquatic Acute: 10 -

Aquatic Chronic: 10

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

## In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

# 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

#### **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

# 5.2 Special hazards arising from the substance or mixture

Carbon oxides

#### **5.3** Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

#### **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510): 13: Non Combustible Solids

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

# 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Personal protective equipment

#### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

# Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

# **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

a) Appearance Form: flakes

Colour: white

b) Odour phenol-like

Odour Threshold No data available рΗ No data available d)

Melting point/freezing point

Melting point/range: 79 - 82 °C - lit.

Initial boiling point and

175 °C at 40 hPa - lit.

boiling range

g) Flash point No data available No data available h) Evaporation rate i) Flammability (solid, gas) No data available

Upper/lower j) flammability or explosive limits

No data available

k) Vapour pressure 0,02 hPa at 38 °C Vapour density No data available I) m) Relative density No data available

0,007 g/l at 20 °C - slightly soluble n) Water solubility

o) Partition coefficient: n-

octanol/water

log Pow: 4,8 at 22 °C

p) Auto-ignition temperature No data available

q) Decomposition temperature

No data available

Viscosity No data available r) s) Explosive properties No data available Oxidizing properties No data available

#### 9.2 Other safety information

Bulk density 370 kg/m3 at 22 °C

#### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

No data available

# 10.5 Incompatible materials

Strong oxidizing agents

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available

In the event of fire: see section 5

#### **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

# **Acute toxicity**

LD50 Oral - Rat - male and female - > 2.000 mg/kg

(OECD Test Guideline 401)

# Skin corrosion/irritation

Skin - Rabbit

Result: Irritating to skin. - 4 h

(OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eves - Rabbit

Result: Risk of serious damage to eyes. - 1 h

(OECD Test Guideline 405)

#### Respiratory or skin sensitisation

- Guinea pig

Result: Does not cause skin sensitisation.

(OECD Test Guideline 406)

#### Germ cell mutagenicity

Hamster

ovary

Result: negative

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

No data available

#### **Additional Information**

Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 15 mg/kg - Lowest observed adverse effect level - 150 mg/kg

RTECS: SM9625000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

Toxicity to fish static test LC50 - Fundulus heteroclitus - 0,293 mg/l - 96 h(4-(1,1,3,3-

Tetramethylbutyl)phenol)

Toxicity to algae static test EC50 - Selenastrum capricornutum (green algae) - 1,9 mg/l - 96 h(4-

(1,1,3,3-Tetramethylbutyl)phenol)

#### 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d(4-(1,1,3,3-Tetramethylbutyl)phenol)

Result: 0 % - Not readily biodegradable.

# 12.3 Bioaccumulative potential

Bioaccumulation Oryzias latipes - 48 h

- 0,0047 mg/l(4-(1,1,3,3-Tetramethylbutyl)phenol)

Bioconcentration factor (BCF): 261 (OECD Test Guideline 305)

#### 12.4 Mobility in soil

No data available(4-(1,1,3,3-Tetramethylbutyl)phenol)

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

# Contaminated packaging

Dispose of as unused product.

#### **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: 3077 IMDG: 3077 IATA: 3077

# 14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (4-(1,1,3,3-

Tetramethylbutyl)phenol)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (4-(1,1,3,3-

Tetramethylbutyl)phenol)

IATA: Environmentally hazardous substance, solid, n.o.s. (4-(1,1,3,3-Tetramethylbutyl)phenol)

# 14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

#### 14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: no IATA: yes

#### 14.6 Special precautions for user

#### **Further information**

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

## **SECTION 15: Regulatory information**

# **15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

# Authorisations and/or restrictions on use

# 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

#### **SECTION 16: Other information**

#### Full text of H-Statements referred to under sections 2 and 3.

H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.