# 4-TERT-OCTYLPHENOL FOR SYNTHESIS MSDS

**CAS No: 140-66-9 MSDS** 



# **MATERIAL SAFETY DATA SHEET (MSDS)**

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

#### 1.1. Product identifier

Product form : Substance

:

EC index no : 604-075-00-6 EC no : 205-426-2 CAS No : 140-66-9 Product code : 05039

Chemical structure :

t-Bu CH<sub>3</sub>

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

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

## 1.2.2. Uses advised against

No additional information available

# 1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries 1st Floor , Above Bank of India, Guru Vihar , Rahon Road, Ludhiana Pb. (141007)

+91 9316777775, +91 7707855700

sales@labogens.com - www.Labogens.com

# 1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, H315

Category 2

Serious eye damage/eye H318

irritation, Category 1

Hazardous to the aquatic H410

environment — Chronic Hazard, Category 1

Full text of classification categories and H statements : see section 16

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#### Classification according to Directive 67/548/EEC or 1999/45/EC

Carc.Cat.3; R40 Muta.Cat.3; R68 Repr.Cat.3; R62 Xn; R21 Xi; R41 Xi; R38

N; R50/53

Full text of R-phrases: see section 16

# Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

# Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS05

GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H315 - Causes skin irritation

H318 - Causes serious eye damage

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face protection P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

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

P501 - Dispose of contents/container to ...

# 2.3. Other hazards

This substance/mixture meets the PBT criteria of REACH regulation, annex XIII This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII

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

## 3.1. Substance

Name : 4-tert-OCTYLPHENOL FOR SYNTHESIS

CAS No : 140-66-9 EC no : 205-426-2 EC index no : 604-075-00-6

Full text of R- and H-phrases: see section 16

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#### 3.2. Mixture

Not applicable

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

#### 4.1. Description of first aid measures

First-aid measures after inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact

: Immediately call a POISON CENTER or doctor/physician. Specific measures (see ... on this label). Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see ... on this label). Gently wash with plenty of soap and water.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Immediately call a POISON CENTER or

doctor/physician.

First-aid measures after ingestion

: Rinse mouth out with water. If you feel unwell, seek medical advice.

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

Symptoms/injuries

: May cause damage to organs.

Symptoms/injuries after skin contact

: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin. Causes skin irritation.

Symptoms/injuries after eye contact

: Causes serious eye damage.

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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

Suitable extinguishing media

: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Unsuitable extinguishing media

: Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

# 5.3. Advice for firefighters

Protection during firefighting

: Do not attempt to take action without suitable protective equipment.

# **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

# 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Avoid breathing dust/fume/gas/mist/vapours/spray.

Emergency procedures : Stop release.

#### 6.2. Environmental precautions

Very toxic to aquatic life with long lasting effects.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clear up rapidly by scoop or vacuum.

#### 6.4. Reference to other sections

No additional information available

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# **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Hygiene measures : Wash ... thoroughly after handling.

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

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place.

#### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

# 8.1. Control parameters

No additional information available

## 8.2. Exposure controls

Personal protective equipment : Wash ... thoroughly after handling.

Hand protection : protective gloves

Eye protection : Chemical goggles or safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear respiratory protection

Other information : Do not breathe dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when

using this product.

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

# 9.1. Information on basic physical and chemical properties

Physical state : Solid

Colour : White flakes.

Odour : No data available

Odour threshold : No data available

pH : 6 at 10 g/l at 20  $^{\circ}$ C

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 79 - 82

Freezing point : No data available

Boiling point :  $175 \, ^{\circ}\text{C}$ Flash point :  $145 \, ^{\circ}\text{C}$ 

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

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Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Density : 0.912 g/cm<sup>3</sup>

Solubility : No data available

Log Pow : 3.7

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

## 9.2. Other information

No additional information available

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

No additional information available

## 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

## 10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

# 10.5. Incompatible materials

No additional information available

## 10.6. Hazardous decomposition products

No additional information available

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes skin irritation.

pH: 6 at 10 g/l at 20 °C

Serious eye damage/irritation : Causes serious eye damage.

pH: 6 at 10 g/l at 20  $^{\circ}\text{C}$ 

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

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Reproductive toxicity

: Not classified

Specific target organ toxicity (single

: Not classified

exposure)

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard

: Not classified

Potential adverse human health effects

and symptoms

: Harmful in contact with skin.

# SECTION 12: Ecological information

## 12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

# 12.2. Persistence and degradability

# 4-tert-OCTYLPHENOL FOR SYNTHESIS (140-66-9)

Persistence and degradability May cause long-term adverse effects in the environment.

# 12.3. Bioaccumulative potential

4-tert-OCTYLPHENOL FOR SYNTHESIS (	(140-66-9)

Log Pow 3.7

## 12.4. Mobility in soil

No additional information available

# 12.5. Results of PBT and vPvB assessment

# 4-tert-OCTYLPHENOL FOR SYNTHESIS (140-66-9)

This substance/mixture meets the PBT criteria of REACH regulation, annex XIII

This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII

#### 12.6. Other adverse effects

No additional information available

# **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Product/Packaging disposal recommendations

: Dispose of contents/container to ...

## **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

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## 14.1. UN number

UN-No. (ADR) : 3077 UN-No. (IMDG) : 3077 UN-No.(IATA) : 3077 UN-No.(ADN) : 3077 UN-No. (RID) : 3077

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Proper Shipping Name (IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Proper Shipping Name (ADN) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Proper Shipping Name (RID) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Transport document description (ADR) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III,

(E)

Transport document description (IMDG) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III,

MARINE POLLUTANT

Transport document description (IATA) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III

Transport document description (ADN) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III

Transport document description (RID) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III

# 14.3. Transport hazard class(es)

#### **ADR**

Transport hazard class(es) (ADR) : 9
Danger labels (ADR) : 9



#### **IMDG**

Transport hazard class(es) (IMDG) : 9
Danger labels (IMDG) : 9



# **IATA**

Transport hazard class(es) (IATA) : 9
Hazard labels (IATA) : 9



#### **ADN**

Transport hazard class(es) (ADN) : 9
Danger labels (ADN) : 9

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RID

Transport hazard class(es) (RID) : 9
Danger labels (RID) : 9



14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes

Other information : No supplementary information available

# 14.6. Special precautions for user

## - Overland transport

Classification code (ADR) : M7

Special provision (ADR) : 274, 335, 601, 375

Limited quantities (ADR) : 5kg Excepted quantities (ADR) : E1

Packing instructions (ADR) : P002, IBC08, LP02, R001

Special packing provisions (ADR) : PP12, B3

Mixed packing provisions (ADR) : MP10

Portable tank and bulk container : T1, BK1, BK2

instructions (ADR)

Portable tank and bulk container special : TP33

provisions (ADR)

Tank code (ADR) : SGAV, LGBV

Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages : V13

(ADR)

Special provisions for carriage - Bulk : VC1, VC2

(ADR)

Special provisions for carriage - Loading, : CV13

unloading and handling (ADR)

initioading and nanding (ADIX)

Hazard identification number (Kemler No.) : 90

Orange plates :

90 3077

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Tunnel restriction code (ADR) : E EAC code : 2Z

#### - Transport by sea

Special provision (IMDG) : 274, 335, 966, 967, 969

Limited quantities (IMDG) : 5 kg
Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : P002, LP02
Packing provisions (IMDG) : PP12
IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B3

Tank instructions (IMDG) : T1, BK1, BK2, BK3

Tank special provisions (IMDG) : TP33

EmS-No. (Fire) : F-A

EmS-No. (Spillage) : S-F

Stowage category (IMDG) : A

Stowage and handling (IMDG) : SW23

MFAG-No : 171

#### - Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y956
PCA limited quantity max net quantity : 30kgG

(IATA)

PCA packing instructions (IATA) : 956
PCA max net quantity (IATA) : 400kg
CAO packing instructions (IATA) : 956
CAO max net quantity (IATA) : 400kg

Special provision (IATA) : A97, A158, A179, A197

ERG code (IATA) : 9L

# - Inland waterway transport

Classification code (ADN) : M7

Special provisions (ADN) : 274, 335, 375, 601

Limited quantities (ADN) : 5 kg
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T\* B\*\*
Equipment required (ADN) : PP, A
Number of blue cones/lights (ADN) : 0

#### - Rail transport

Classification code (RID) : M7

Special provision (RID) : 274, 335, 375, 601

Limited quantities (RID) : 5kg Excepted quantities (RID) : E1

Packing instructions (RID) : P002, IBC08, LP02, R001

Special packing provisions (RID) : PP12, B3

Mixed packing provisions (RID) : MP10

Portable tank and bulk container : T1, BK1, BK2

instructions (RID)

Portable tank and bulk container special

provisions (RID)

: TP33

Tank codes for RID tanks (RID) : SGAV, LGBV

Transport category (RID) : 3
Special provisions for carriage – Packages : W13

(RID)

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# Safety Data Sheet

Special provisions for carriage – Bulk : VC1, VC2

(RID)

Special provisions for carriage - Loading

and unloading (RID)

: CW13, CW31

Colis express (express parcels) (RID) : CE11 Hazard identification number (RID) : 90

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

# SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

4-(1,1,3,3-tetramethylbutyl)phenol is on the REACH Candidate List

4-tert-OCTYLPHENOL FOR SYNTHESIS is not on the REACH Annex XIV List

# 15.1.2. National regulations

#### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (KBwS-Beschluss; WGK

No 1663)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BlmSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### **Denmark**

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct

contact with the product

The requirements from the Danish Working Environment Authorities regarding work

with carcinogens must be followed during use and disposal

# 15.2. Chemical safety assessment

No additional information available

## **SECTION 16: Other information**

## Full text of R-, H- and EUH-phrases:

	Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
	Eye Dam. 1	Serious eye damage/eye irritation, Category 1
	Skin Irrit. 2	Skin corrosion/irritation, Category 2

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H315	Causes skin irritation
H318	Causes serious eye damage
H410	Very toxic to aquatic life with long lasting effects
R21	Harmful in contact with skin
R38	Irritating to skin
R40	Limited evidence of a carcinogenic effect
R41	Risk of serious damage to eyes
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R62	Possible risk of impaired fertility
R68	Possible risk of irreversible effects
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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