# SAFETY DATA SHEET

Version 3.5 Revision Date 02/10/2015 Print Date 11/10/2018

### 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : 2,4,6-Tri-tert-butylphenol

Product Number : T49409 Brand : Aldrich

CAS-No. : 732-26-3

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

# 2. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302 Acute aquatic toxicity (Category 1), H400

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

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed. H400 Very toxic to aquatic life.

Precautionary statement(s)

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you

feel unwell. Rinse mouth.

P391 Collect spillage.

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

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

Aldrich - T49409 Page 1 of 7

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Formula : C<sub>18</sub>H<sub>30</sub>O Molecular weight : 262.43 g/mol CAS-No. : 732-26-3 EC-No. : 211-989-5

# **Hazardous components**

| Component                  | Classification                 | Concentration |
|----------------------------|--------------------------------|---------------|
| 2,4,6-Tri-tert-butylphenol |                                |               |
|                            | Acute Tox. 4; Aquatic Acute 1; | <= 100 %      |
|                            | H302, H400                     |               |

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

### 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. Move out of dangerous area.

#### 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

Flush eyes with water as a precaution.

#### 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

## 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

# **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.

Aldrich - T49409 Page 2 of 7

#### 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.

### 7. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

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

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

Storage class (TRGS 510): Non Combustible Solids

### 7.3 Specific end use(s)

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

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### 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

Safety glasses with side-shields conforming to EN166 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

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

a) Appearance Form: crystalline

Colour: yellow

b) Odour No data available

Aldrich - T49409 Page 3 of 7

No data available Odour Threshold c) No data available

Melting point/freezing

Melting point/range: 125 - 130 °C (257 - 266 °F) - lit.

Initial boiling point and boiling range

277 °C (531 °F) - lit.

130.00 °C (266.00 °F) - closed cup g) Flash point

h) Evaporation rate No data available i) Flammability (solid, gas) No data available No data available j) Upper/lower

flammability or explosive limits

k) Vapour pressure No data available Vapour density No data available m) Relative density No data available n) Water solubility No data available o) Partition coefficient: n-No data available octanol/water

p) Auto-ignition

No data available

temperature Decomposition temperature

No data available

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

#### 9.2 Other safety information

No data available

# 10. STABILITY AND REACTIVITY

#### Reactivity

No data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

No data available

#### Incompatible materials 10.5

Bases, Acid chlorides, Acid anhydrides, Oxidizing agents, Brass, Copper

#### 10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

# 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

**Acute toxicity** 

Inhalation: No data available

Aldrich - T49409 Page 4 of 7 Dermal: No data available

No data available

#### Skin corrosion/irritation

No data available

# Serious eye damage/eye irritation

No data available

# Respiratory or skin sensitisation

No data available

# Germ cell mutagenicity

No data available

# 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.

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

carcinogen or potential carcinogen by ACGIH.

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

known or anticipated carcinogen by NTP.

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

carcinogen or potential carcinogen by OSHA.

# Reproductive toxicity

No data available

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**

RTECS: SN3570000

## 12. ECOLOGICAL INFORMATION

## 12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 0.061 mg/l - 96.0 h

#### 12.2 Persistence and degradability

No data available

# 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

Aldrich - T49409 Page 5 of 7

### 13. DISPOSAL CONSIDERATIONS

# 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

# 14. TRANSPORT INFORMATION

## DOT (US)

Not dangerous goods

**IMDG** 

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,4,6-Tri-tert-butylphenol)

Marine pollutant:yes

**IATA** 

UN number: 3077 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (2,4,6-Tri-tert-butylphenol)

#### **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.

### 15. REGULATORY INFORMATION

#### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### **SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

## SARA 311/312 Hazards

Acute Health Hazard

# Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

# Pennsylvania Right To Know Components

2,4,6-Tri-tert-butylphenol CAS-No. Revision Date 2009-07-17

**New Jersey Right To Know Components** 

CAS-No. Revision Date 2,4,6-Tri-tert-butylphenol 732-26-3 2009-07-17

## California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

# **16. OTHER INFORMATION**

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

Acute Tox. Acute toxicity
Aquatic Acute Acute aquatic toxicity
H302 Harmful if swallowed.
H400 Very toxic to aquatic life.

Aldrich - T49409 Page 6 of 7

## **HMIS Rating**

Health hazard: 1
Chronic Health Hazard:
Flammability: 0
Physical Hazard 0

# **NFPA Rating**

Health hazard: 1
Fire Hazard: 0
Reactivity Hazard: 0

# **Further information**

Copyright 2015 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. 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. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

# **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

Version: 3.5 Revision Date: 02/10/2015 Print Date: 11/10/2018

Aldrich - T49409 Page 7 of 7