

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 16 Aug 2022

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product name:

2,4,6-Tri-tert-butylphenol

### 1.1. Catalog No.:

688308

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical  
uses: R&D

### 1.3. Uses advised against:

HPC Standards GmbH  
Am Wieseneck 7

04451 Cunnersdorf  
Deutschland

Tel. +49 34291 3372-36  
Fax. +49 34291 3372-39  
contact@hpc-standards.com

### 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36  
This number is only available during office hours.

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture  
· Classification according to Regulation (EC) No 1272/2008

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

2.2 Label elements  
· Labelling according to Regulation (EC) No 1272/2008  
The substance is classified and labelled according to the CLP regulation.  
· Signal word Warning  
· Hazard statements  
H302 Harmful if swallowed.  
H315 Causes skin irritation.

H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H335 May cause respiratory irritation.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H410 Very toxic to aquatic life with long lasting effects.  
· Precautionary statements  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves / 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.  
P321 Specific treatment (see on this label).  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.  
2.3 Other hazards  
· Results of PBT and vPvB assessment  
· PBT: Not applicable.  
· vPvB: Not applicable.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical characterisation: Substances  
· CAS No. Description  
732-26-3 2,4,6-tri-tert-butylphenol  
· Identification number(s) None  
· EC number: 211-898-5  
· RTECS: SN3570000

#### 3.1.1. Formula

C<sub>18</sub>H<sub>30</sub>O

#### 3.1.2. Molecular Weight (g/mol)

262.43

#### 3.1.3. CAS-No.

732-26-3

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may occur even after several hours; therefore medical observation for at least 48 hours after the accident is recommended.

· After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse mouth. Do not induce vomiting.

Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

· Suitable extinguishing agents: Use fire extinguishing methods suitable for surrounding conditions.

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

During heating or in case of fire poisonous gases are produced.

### 5.3 Advice for firefighters

· Protective equipment:

Mouth respiratory protective device.

Wear self-contained respiratory protective device.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Avoid formation of dust.

### 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

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

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Ensure good ventilation/extraction at the workplace.

Store in cool, dry place in tightly closed receptacles.

· Information about fire - and explosion protection: Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

Please refer to the manufacturers certificate for specific storage and transport temperature conditions.

Store only in the original receptacle.

Keep container in a well-ventilated place. Keep away from sources of ignition and heat.

· Information about storage in one common storage facility: Store away from foodstuffs.

· Further information about storage conditions: Keep container tightly sealed.

7.3 Specific end use(s) No further relevant information available.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace: Not required.

· Additional information: Lists used were valid at the time of SDS preparation.

8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374

Protective gloves

· Material of gloves Nitrile rubber, NBR

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Tightly sealed goggles

## 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Crystalline

Colour: Yellowish

· Odour: Odourless

· Odour threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/freezing point: 125-130 °C

Initial boiling point and boiling range: 277 °C

· Flash point: 130 °C

· Flammability (solid, gas): Not determined.

· Ignition temperature: Not determined

· Decomposition temperature: Not determined.

- Auto-ignition temperature: Not determined.
  - Explosive properties: Not determined.
  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.
  - Vapour pressure at 25 °C: 0 hPa
  - Density at 20 °C: 0.864 g/cm<sup>3</sup>
  - Relative density Not determined.
  - Vapour density Not applicable.
  - Evaporation rate Not applicable.
  - Solubility in / Miscibility with Ethanol, Acetone, Carbon Tetrachloride
  - water at 25 °C: .0035 g/l
  - Partition coefficient: n-octanol/water: 6.06 logP
  - Viscosity:
    - Dynamic: Not applicable.
    - Kinematic: Not applicable.
- 9.2 Other information No further relevant information available.

## 10. STABILITY AND REACTIVITY

- 10.1 Reactivity Stable under normal conditions.
- 10.2 Chemical stability Stable under normal conditions.
- Thermal decomposition / conditions to be avoided:  
Formation of toxic gases is possible during heating or in case of fire.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid Heat.
- 10.5 Incompatible materials: Strong oxidizing agents.
- 10.6 Hazardous decomposition products:  
Formation of toxic gases is possible during heating or in case of fire.

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects
  - Acute toxicity  
Harmful if swallowed.
  - LD/LC50 values relevant for classification:  
Oral LD50 1,610 mg/kg (rat)
  - Primary irritant effect:
    - Skin corrosion/irritation  
Causes skin irritation.
    - Serious eye damage/irritation  
Causes serious eye irritation.
    - Respiratory or skin sensitisation  
May cause an allergic skin reaction.
  - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
    - Germ cell mutagenicity Based on available data, the classification criteria are not met.
    - Carcinogenicity Based on available data, the classification criteria are not met.
    - Reproductive toxicity Based on available data, the classification criteria are not met.
  - STOT-single exposure  
May cause respiratory irritation.
  - STOT-repeated exposure  
May cause damage to organs through prolonged or repeated exposure.
  - Aspiration hazard Based on available data, the classification criteria are not met.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

- Aquatic toxicity:

LC50/96 h 0.0609 mg/l (fish)

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

- Ecotoxicological effects:

· Remark: Very toxic for fish

- Additional ecological information:

- General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

### 12.5 Results of PBT and vPvB assessment

- PBT: Not applicable.

- vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

- Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- European waste catalogue

Waste disposal key numbers from EWC have to be assigned depending on origin and processing.

- Uncleaned packaging:

- Recommendation: Dispose of in accordance with national regulations.

## 14. TRANSPORT INFORMATION

### 14.1 UN-Number

- ADR, IMDG, IATA UN3077

- ADR 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S. (2,4,6-tri-tert-butylphenol)

- IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S. (2,4,6-tri-tert-butylphenol), MARINE

POLLUTANT

- IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S. (2,4,6-tri-tert-butylphenol)

### 14.3 Transport hazard class(es)

- ADR, IMDG, IATA

- Class 9 Miscellaneous dangerous substances and articles.

- Label 9

### 14.4 Packing group

- ADR, IMDG, IATA III

### 14.5 Environmental hazards:

- Marine pollutant: Symbol (fish and tree)

- Special marking (ADR): Symbol (fish and tree)

- Special marking (IATA): Symbol (fish and tree)

### 14.6 Special precautions for user Warning: Miscellaneous dangerous substances and articles.

- Danger code (Kemler): 90

- EMS Number: F-A,S-F

### 14.7 Transport in bulk according to Annex II of

Marpol and the IBC Code Not applicable.

- Transport/Additional information:

- ADR

- Limited quantities (LQ) 5 kg
  - Excepted quantities (EQ) Code: E1
- Maximum net quantity per inner packaging: 30 g  
Maximum net quantity per outer packaging: 1000 g
- Transport category 3
  - UN "Model Regulation": UN 3 0 7 7 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,4,6-TRI -TERTBUTYLPHENOL), 9, III

## 15. REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Philippines Inventory of Chemicals and Chemical Substances Substance is listed.
  - Australian Inventory of Chemical Substances Substance is listed.
  - Standard for the Uniform Scheduling of Medicines and Poisons Substance is not listed.
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX I Substance is not listed.
  - Seveso category E1 Hazardous to the Aquatic Environment
  - Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
  - Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 16. OTHER 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. For lab use only!