

# MATERIAL SAFETY DATA SHEET (MSDS)

## TRIBUTYL PHOSPHATE (FOR SYNTHESIS)

### 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : TRIBUTYL PHOSPHATE (FOR SYNTHESIS)

**Product code** : SS0119400500 Identification of the product : Tributyl phosphate CAS No: 126-73-8

EC No: 204-800-2 Annex No: 015-014-00-2

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

: Industrial. For professional use only. Use

1.3. Details of the supplier of the safety data sheet

**SUVCHEM** Company identification

Chaitanya Tower, 2nd Floor, Office # 206,

Siddharth Nagar, S.V. Road,

Goregaon (West), Mumbai - 400062,

Maharashtra, India.

Contact: +91 22 28725393 / 94 / 95

Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

: + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ] Phone no.

#### **Hazards identification -DSD**

#### 2.1. Classification of the substance or mixture

### Classification EC 67/548 or EC 1999/45

Classification : Carc. Cat. 3; R40

> Xn: R22 Xi; R38

### Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

**Health hazards** : Carcinogenicity - Category 2 - Warning (CLP: Carc. 2) H351

Skin irritation - Category 2 - Warning (CLP: Skin Corr. 2) H315

Acute toxicity, Oral - Category 4 - Warning (CLP: Acute Tox. 4) H302

2.2. Label elements

#### Labelling EC 67/548 or EC 1999/45



# MATERIAL SAFETY DATA SHEET (MSDS)

# TRIBUTYL PHOSPHATE (FOR SYNTHESIS)

### 2. Hazards identification -DSD (continued)

Symbol(s)

×

Symbol(s) : Xn : Harmful

R Phrase(s) : R22 : Harmful if swallowed.

R38: Irritating to skin.

R40: Limited evidence of a carcinogenic effect.

S Phrase(s) : S2 : Keep out of the reach of children.

S36/37: Wear suitable protective clothing and gloves.

S46: If swallowed seek medical advice immediately and show this container or

label.

Contains : Tributyl phosphate

### Labelling Regulation EC 1272/2008 (CLP)

**Hazard pictograms** 





Signal words : Warning

**Hazard statements** : H351 : Suspected of causing cancer.

H302 : Harmful if swallowed. H315 : Causes skin irritation.

**Precautionary statements** 

• General : P102: Keep out of reach of children.

P103: Read label before use.

P101: If medical advice is needed, have product container or label at hand.

P201: Obtain special instructions before use.

• **Prevention** : P280: Wear protective gloves, protective clothing, eye protection, face protection.

P264: Wash thoroughly after handling.

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

• Response : P302+P352: IF ON SKIN : Wash with plenty of soap and water.

P301+P312: IF SWALLOWED : Call a POISON CENTER or doctor if you feel

unwell.

P308+P313: If exposed or concerned : get medical advice. P332+P313: If skin irritation occurs : Get medical advice.

P363: Wash contaminated clothing before reuse.

• **Storage** : P405: Store locked up.

• **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste

collection point, in accordance with local, regional, national and/or international

regulation.

Contains : Tributyl phosphate

2.3. Other hazards



# MATERIAL SAFETY DATA SHEET (MSDS)

## TRIBUTYL PHOSPHATE (FOR SYNTHESIS)

### 2. Hazards identification -DSD (continued)

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

### 3. Composition/information on ingredients

Substance / Preparation : Tributyl phosphate

EC No :204-800-2 Annex No :015-014-00-2

Substance.

Substance name Contents CAS No EC No Annex No REACH Ref. Classification

Tributyl phosphate : 100 % 126-73-8 204-800-2 015-014-00-2 ---- Carc. Cat. 3; R40 Xn; R22 Xi; R38

Acute Tox. 4 (oral) \_ H302 Carc. 2 \_ H351 Skin Irrit. 2 \_ H315

Contains no other components or impurities which will influence the classification of the product.

#### 4. First aid measures

#### 4.1. Description of first aid measures

**Inhalation** : Assure fresh air breathing. Allow the victim to rest.

**Skin contact**: Wash contaminated clothing before reuse. Wash with plenty of soap and water. If

skin irritation occurs : Get medical advice. Specific treatment (see on this label).

**Eye contact** : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or

redness persist.

Ingestion : Obtain emergency medical attention. Call a POISON CENTER or doctor if you feel

unwell. Do NOT induce vomiting. Rinse mouth.

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

Symptoms relating to use : Swallowing a small quantity of this material will result in serious health hazard.

Suspected of causing cancer.

Causes skin irritation.

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

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek

medical advice (show the label where possible).

### 5. Fire-fighting measures

#### 5.1. Extinguishing media



# MATERIAL SAFETY DATA SHEET (MSDS)

## TRIBUTYL PHOSPHATE (FOR SYNTHESIS)

## 5. Fire-fighting measures (continued)

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media**: Do not use a heavy water stream.

**Surrounding fires** : Use water spray or fog for cooling exposed containers.

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

Hazardous combustion products : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory

protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to

enter environment.

### 6. Accidental release measures

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

**For emergency responders** : Equip cleanup crew with proper protection.

Ventilate area.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters

sewers or public waters.

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

Clean up methods : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as

possible. Store away from other materials. Collect spillage.

## 6.4. Reference to other sections

See section 8. Exposure controls/personal protection

### 7. Handling and storage

### 7.1. Precautions for safe handling

**Handling** : Wash thoroughly after handling. Obtain special instructions before use. Wash

thoroughly after handling. Do not eat, drink or smoke when using this product.



# MATERIAL SAFETY DATA SHEET (MSDS)

# TRIBUTYL PHOSPHATE (FOR SYNTHESIS)

## 7. Handling and storage (continued)

**Technical protective measures**: Provide good ventilation in process area to prevent formation of vapour.

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

Storage : Keep only in the original container in a cool, well ventilated place. Keep container

closed when not in use.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

Specific end use(s) : None.

### 8. Exposure controls/personal protection

### 8.1. Exposure controls

**Personal protection** : Avoid all unnecessary exposure.

Respiratory protection : Wear approved mask.Hand protection : Wear protective gloves.

Skin protection
 Eye protection
 Chemical goggles or safety glasses.
 Others
 Wear suitable protective clothing.
 Chemical goggles or safety glasses.
 When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

### 9. Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Solid.

Colour : Pale yellow liquid

Odour : Odorless

Odour threshold : No data available. pH value : No data available.

Melting point [°C] : -79 °C

Decomposition point [°C] : N/A

Critical temperature [°C] : N/A

Auto-ignition temperature [°C] : 482 °C

Flammability (solid, gas) : N/A



# MATERIAL SAFETY DATA SHEET (MSDS)

## TRIBUTYL PHOSPHATE (FOR SYNTHESIS)

## 9. Physical and chemical properties (continued)

Flash point [°C] : 145 °C

Boiling point [°C] : 180 - 183 °C

Initial boiling point [°C] : 180 °C

Final boiling point [°C] : 183 °C

Evaporation rate : N/A

Vapour pressure [20°C] : N/A

Vapour pressure mm/Hg : 36 mm Hg at 178 °C

Vapour density : 9,19
Density [g/cm3] : 0,979
Relative density, gas (air=1) : N/A
Relative density, liquid (water=1) : N/A

Solubility in water [% weight] : Slightly soluble in

Solubility in water : N/A

Log Pow octanol / water at 20°C : No data available.

Solubility : N/A Viscosity at 40°C [mm2/s] : N/A

9.2. Other information

Explosive properties : N/A
Explosion limits - upper [%] : N/A
Explosion limits - lower [%] : N/A

Oxidising properties : No data available.

### 10. Stability and reactivity

#### 10.1. Reactivity

**Reactivity** : Not established.

10.2. Chemical stability

**Chemical stability** : Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

Hazardous reactions : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.



# MATERIAL SAFETY DATA SHEET (MSDS)

## TRIBUTYL PHOSPHATE (FOR SYNTHESIS)

### 10. Stability and reactivity (continued)

#### 10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

# 11. Toxicological information

### 11.1. Information on toxicological effects

**Acute toxicity** 

Inhalation
 Based on available data, the classification criteria are not met.
 Dermal
 Based on available data, the classification criteria are not met.

• Ingestion : Harmful if swallowed.

**Corrosion** : Based on available data, the classification criteria are not met.

**Irritation** : Causes skin irritation.

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

**Carcinogenicity** : Suspected of causing cancer.

Toxic for reproduction : Based on available data, the classification criteria are not met.

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

## 12. Ecological information

#### 12.1. Toxicity

**Toxicity information** : Not established.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil



# MATERIAL SAFETY DATA SHEET (MSDS)

## TRIBUTYL PHOSPHATE (FOR SYNTHESIS)

### 12. Ecological information (continued)

Mobility in soil : Not established.

#### 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

**Environmental precautions** : Avoid release to the environment.

## 13. Disposal considerations

## 13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with

local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

# 14. Transport information

#### 14.1. Land transport (ADR-RID)

**General information** : Not regulated.

### 14.2. Sea transport (IMDG) [English only]

**General information** : Not regulated.

### 14.3. Air transport (ICAO-IATA) [English only]

General information : Not regulated.

### 15. Regulatory information

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

Safety, health and environmental : Ensure all national/local regulations are observed.

regulations/legislation specific for the

substance or mixture

**REACH Restrictions - Annex XVII**: The components of this product are not subject to restrictions.



# MATERIAL SAFETY DATA SHEET (MSDS)

## TRIBUTYL PHOSPHATE (FOR SYNTHESIS)

In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

## **DISCLAIMER:**

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- SUVCHEM shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

**End of document**