

# TCI AMERICA SAFETY DATA SHEET

Revision number: 1 **Revision date: 07/06/2018** 

1. IDENTIFICATION

Product name: Triphenylphosphine

Product code: T0519

For laboratory research purposes. Product use: Restrictions on use: Not for drug or household use.

Company: TCI America

9211 N. Harborgate Street Portland, OR 97203 U.S.A.

Telephone:

+1-800-423-8616 / +1-503-283-1681

Fax:

+1-888-520-1075 / +1-503-283-1987

e-mail:

sales-US@TCIchemicals.com www.TCIchemicals.com

Emergency telephone number:

Chemical Emergencies:

TCI America (8:00am - 5:00pm) PST

+1-503-286-7624

Transportation Emergencies: Chemtrec 24-Hour

+1-800-424-9300 (U.S.A.) +1-703-527-3887 (International)

Responsible department:

TCI America

Environmental Health Safety and Security

+1-503-286-7624

#### 2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Acute Toxicity - Oral [Category 4]

Skin Corrosion/Irritation [Category 2] WHMIS 2015: Eye Damage/Irritation [Category 2A]

Sensitization - Skin [Category 1]

Specific Target Organ Toxicity (Single Exposure) [Category 3] Specific Target Organ Toxicity (Repeated Exposure) [Category 1] Specific Target Organ Toxicity (Repeated Exposure) [Category 2]

Aquatic Hazard (Long-Term) [Category 4]

Signal word: Danger!

Hazard Statement(s): Harmful if swallowed

Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction

May cause long lasting harmful effects to aquatic life

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure: Nervous System Heart

May cause damage to organs through prolonged or repeated exposure: Liver

Pictogram(s) or Symbol(s):





Precautionary Statement(s):

[Response]

[Storage] [Disposal]

[Prevention] Do not breathe dust, fume, mist, vapors or spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not eat, drink or smoke when using this product. Contaminated work

clothing must not be allowed out of the workplace. Wash hands and face thoroughly after handling.

Wear protective gloves, eye protection.

None.

If swallowed: Call a poison center or doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a

poison center or doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get

medical advice or attention. Get medical advice or attention if you feel unwell. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40

CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified:

#### [HNOC]

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: Triphenylphosphine

 Percent:
 >95.0%(T)

 CAS RN:
 603-35-0

 Molecular Weight:
 262.29

 Chemical Formula:
 C18H15P

#### 4. FIRST-AID MEASURES

Description of first aid measures

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

CENTER or doctor/physician if you feel unwell.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If

skin irritation or rash occurs: Get medical advice/attention.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Symptoms/effects:

Acute: Redness.

**Delayed:** No data available

Indication of any immediate medical attention:

Not available.

Notes to physician:

No data available

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Dry chemical, foam, water spray, carbon dioxide.

**Hazardous combustion products:** 

Other specific hazards: Closed containers may explode from heat of a fire.

Advice for firefighters: Wear self-contained breathing apparatus if possible.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Environmental precautions:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Prevent product from entering drains.

Methods and materials for containment

and cleaning up:

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

### 7. HANDLING AND STORAGE

Precautions for safe handling: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent

These products include: Carbon oxides Phosphates

dispersion of dust. Wash hands and face thoroughly after handling.

Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated.

Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool, dark and well-ventilated place.

Store locked up.

Store away from incompatible materials such as oxidizing agents.

Packaging material: Comply with laws.

Triphenylphosphine TCI AMERICA Page 3 of 5

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls: Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators

approved under appropriate government standards and follow local and national regulations.

Hand protection: Impervious gloves.

**Eye protection:** Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: Crystal - Powder

Colour: White Odour: Odorless

Odor threshold:

Odour threshold:

No data available

No data available

Melting point/freezing point:81°C (178°F)pH:No data availableBoiling point/range:260°C /3.3kPa (500°F)Vapour pressure:No data available

Decomposition temperature: No data available Vapour density: 9.0

Relative density: No data available Dynamic Viscosity: No data available

Kinematic viscosity: No data available

Log Pow: No data available Evaporation rate(Butyl No data available

Acetate=1):

Flash point: No data available Autoignition temperature: No data available

Flammability(solid, gas): No data available Flammability or explosive limits:

Lower: No data available Upper: No data available

Solubility(ies):

[Water] Insoluble (0.3mg/L, 25°C)

[Other solvents]

Very soluble: Ether

Soluble: Benzene, Chloroform, Toluene, Many organic solvents

Slightly soluble: Alcohols

## 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under proper conditions.

Possibility of hazardous reactions: No special reactivity has been reported.

Incompatible materials: Oxidizing agents

Hazardous decomposition products: Carbon monoxide, carbon dioxide etc

Triphenylphosphine TCI AMERICA Page 4 of 5

#### 11. TOXICOLOGICAL INFORMATION

RTECS Number: SZ3500000

Acute Toxicity:

orl-rat LD50:70 mg/kg skn-rbt LD50:>5 g/kg ihl-rat LC50:1135 ppm/4H ims-rat LD50:1500 mg/kg

**Skin corrosion/irritation:** skn-rbt 500 mg/24H MLD

**Serious eye damage/irritation:** eye-rbt 500 mg/24H MLD

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity: No data available

IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity:

No data available

Target organ(s):

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure: Nervous System Heart

May cause damage to organs through prolonged or repeated exposure: Liver

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** 

Fish: No data available
Crustacea: No data available
Algae: No data available

Persistence / degradability: No data available Bioaccumulative potential(BCF): No data available

Mobility in soil

Disposal of container:

**Log Pow:** 5.69

Soil adsorption (Koc): No data available

**Henry's Law (PaM ³/mol):** 2.3 x 10<sup>-3</sup>

### 13. DISPOSAL CONSIDERATIONS

**Listed waste** U207/Benzene, 1,2,4,5-tetrachloro-

**Disposal of product:** Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and

Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for

Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not

be allowed to enter the environment, drains, water ways, or the soil. Dispose of as unused product. Do not re-use empty containers.

Other considerations: Observe all federal, state and local regulations when disposing of the substance.

Triphenylphosphine TCI AMERICA Page 5 of 5

# 14. TRANSPORT INFORMATION

 DOT (US)
 Non-hazardous for transportation.

 IATA
 Non-hazardous for transportation.

**IMDG** Non-hazardous for transportation.

### 15. REGULATORY INFORMATION

#### Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

#### **US Federal Regulations**

## **CERCLA Hazardous substance and Reportable Quantity:**

SARA 313: Not Listed SARA 302: Not Listed

**State Regulations** 

State Right-to-Know

MassachusettsNot ListedNew JerseyNot ListedPennsylvaniaNot ListedCalifornia Proposition 65:Not Listed

Other Information

NFPA Rating:HMIS Classification:Health:2Health:2Flammability:1Flammability:1Instability:0Physical:0

**International Inventories** 

**Canada: DSL** On DSL **EC-No:** 210-036-0

### 16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.