

Shanghai Aladdin Biochemical Technology Co., Ltd.  
No. 809, Chuhua Branch Road, Fengxian District, Shanghai

# SAFETY DATA SHEET

Version: v1  
Revision Date: 2024-01-25  
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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Tri(o-tolyl)phosphine  
Product Number : T109497  
Brand : aladdin  
CAS-No. : 6163-58-2

### 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 : Shanghai Aladdin Biochemical Tech Co., Ltd  
Address : 36 Xinjinqiao Road, Shanghai  
Telephone : 400-620-6333  
Fax : no data available

### 1.4 Emergency telephone number


Emergency Phone : 0532-83889090

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)  
Not a hazardous substance

### 2.2 GHS Label elements, including precautionary statements

|                            |   |
|----------------------------|---|
| Pictogram                  |  |
| Signal word                | Warning   |
| Hazard statement(s)        |   |
| H315                       | Causes skin irritation  |
| Precautionary statement(s) |   |
| P261                       | Avoid breathing dust/fume/gas/mist/vapors/spray.                                    |
| P264                       | Wash hands [and ...] thoroughly after handling.                                     |
| P271                       | Use only outdoors or in a well-ventilated area.                                     |
| P273                       | Avoid release to the environment.   |
| P280                       | Wear protective gloves/protective clothing/eye protection/face protection.          |

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|                |  |
|----------------|--|
| P391           | Collect spillage.  |
| P302+P352      | IF ON SKIN: wash with plenty of water.   |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.   |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. |
| P362+P364      | Take off contaminated clothing and wash it before reuse.   |
| P405           | Store locked up.   |
| P403+P233      | Store in a well-ventilated place. Keep container tightly closed.   |
| P501           | Dispose of contents/container to an approved waste disposal plant.   |

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                  |   |
|------------------|---|
| Synonyms         | : Tris(o-tolyl)phosphine Tri(2-methylphenyl)phosphine P(o-tol)3 |
| Formula          | : C21H21P   |
| Molecular weight | : 304.37  |
| CAS No.          | : 6163-58-2   |
| EC-NO.           | : 228-193-9   |

| Component             | Classification    | Concentration |
|-----------------------|-------------------|---------------|
| Tri(o-tolyl)phosphine | no data available | 97%           |

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice  
no data available

If inhaled  
If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact  
Wash off with soap and plenty of water.

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.

### 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

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

no data available

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### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

no data available

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

Carbon oxides, Oxides of phosphorus

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

no data available

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### SECTION 6: Accidental release measures

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

Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8.

#### 6.2 Environmental precautions

No special environmental precautions required.

#### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Light sensitive.

#### 7.3 Specific end use(s)

no data available

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

Appropriate engineering controls  
General industrial hygiene practice.  
Personal protective equipment

#### Eye/face protection

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. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

#### Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

No special environmental precautions required.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|  |                   |
|--|-------------------|
| a) Appearance                              | no data available |
| b) Odour                                   | no data available |
| c) Odour Threshold                         | no data available |
| d) pH                                      | no data available |
| e) Melting point/freezing point            | 124-126°C         |
| f) Initial boiling point and boiling range | no data available |
| g) Flash point                             | no data available |
| h) Evaporation rate                        | no data available |

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|   |                   |
|---|-------------------|
| i) Flammability (solid, gas)                    | no data available |
| j) Upper/lower flammability or explosive limits | no data available |
| k) Vapour pressure                              | no data available |
| l) Vapour density                               | no data available |
| m) Relative density                             | 1.589             |
| n) Water solubility                             | no data available |
| o) Partition coefficient: n-octanol/water       | no data available |
| p) Auto-ignition temperature                    | no data available |
| q) Decomposition temperature                    | no data available |
| r) Viscosity                                    | no data available |
| s) Explosive properties N                       | no data available |
| t) Oxidizing properties N                       | no data available |

## 9.2 Other safety information

no data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Oxides of phosphorus Other decomposition products In the event of fire: see section 5

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity

LD50 Kou - Rats - Female - > 2,000 mg/kg (OECD Test Guideline 423)

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Skin corrosion/irritation

Skin - In vitro Test Results: No Skin Irritation - 1 h (OECD Test Guideline 431)

Serious eye damage/eye irritation

Eyes - Cornea Results: No Eye Irritation - 4 h (OECD Test Guideline 437)

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Test Type: Ames Test System: Salmonella typhimurium Metabolic Activation: With or without Metabolic Activation

Method: OECD Test Guide 471 Results: Negative

Carcinogenicity

no data available

Reproductive toxicity

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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to otter and other aquatic spineless vertebrae Static test EC50 - Daphnia Magna - > 0.005 mg/l - 24 h (OECD test) Guideline 202) Toxicity to algae Static test ErC50 - Pseudokirchneriella subcapitata (green algae) - > 0.011 mg/l - 72 h (OECD Test Guidelines 201)

### 12.2 Persistence and degradability

Biodegradable Aerobics - Exposure time 28 d Result: 3 % - not easy to biodegrade quickly. (OECD Test Guideline 301B)

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

no data available

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## 12.6 Other adverse effects

no data available

## SECTION 13:

### 13.1 Disposal considerations

Product

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

Contaminated packaging

Dispose of as unused product.

## SECTION 14: Transport information

DOT (US)

UN number: no data available

Packing group: no data available

Class: no data available

Proper shipping name: Not dangerous goods

Reportable Quantity(RQ): no data available

Poison Inhalation Hazard: no data available

Environmental Hazards: no

IMDG

UN number: no data available

Packing group: no data available

EMS-No: no data available

Proper shipping name: Not dangerous goods

IATA

UN number: no data available

Packing group: no data available

Class: no data available

Proper shipping name: Not dangerous goods

## SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## SECTION 16: Other information

Further information

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