

Version: v1  
Revision Date: 2023-07-  
18  
Print Date: 2023-07-25

## SAFETY DATA SHEET

### SECTION 1:Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name : Tetraisopropyl Orthosilicate  
Product Number : T161832  
Brand : aladdin  
CAS-No. : 1992-48-9

#### 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)

CFR 1910.1200:Eye Damage/Irritation [Category 1] Flammable Liquids [Category 4] Skin Corrosion/Irritation [Category 1C]

#### 2.2 GHS Label elements, including precautionary statements

##### Pictogram



##### Signal word

Danger

##### Hazard statement(s)

H318

Causes serious eye damage

##### Precautionary statement(s)

P264

Wash hands [and ...] thoroughly after handling.

P280

Wear protective gloves/protective clothing/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.

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

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**SECTION 3: Composition/information on ingredients**

**3.1 Substances**

Synonyms : ['Tetraisopropoxysilane']  
Formula : C12H28O4Si  
Molecular weight : 264.44  
CAS No. : 1992-48-9  
EC-NO. : no data available

Component	Classification	Concentration
<b>Tetraisopropyl Orthosilicate</b>	no data available	>99.0%(GC)

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

**General advice**

no data available

**If inhaled**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

**In case of skin contact**

Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.

**In case of eye contact**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.Immediately call a POISON CENTER or doctor/physician.

**If swallowed**

Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

**4.2 Most important symptoms and effects, both acute and delayed**

no data available

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

no data available

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing media**

Dry chemical, foam, carbon dioxide.

**Unsuitable extinguishing media**

Water (It may scatter and spread fire.)

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

These products include: Carbon oxides Silicates. Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. Closed containers may explode from heat of a fire.

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus if possible.

**5.4 Further information**

Use water spray to cool unopened containers.

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**SECTION 6: Accidental release measures**

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

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

**6.2 Environmental precautions**

Prevent product from entering drains.

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

Absorb spilled material with a suitable absorbent (e.g. rag, dry sand, soil, sawdust). If the overflow is large, use seals to control the overflow. Adhered or aggregated materials shall be disposed of in a timely manner in accordance with local law and regulations. Prevention of secondary hazards: Do not contact with water. Remove all sources of ignition. Fire extinguishing devices shall be provided in case of fire. Use spark proof tools and explosion-proof equipment.

**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**

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from flames and hot surfaces. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid contact with skin, eyes and clothing. Conditions for safe storage, including any incompatibilities

**7.2 Conditions for safe storage, including any incompatibilities**

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.

**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**

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**

##### **Eye/face protection**

Safety goggles. A face-shield, if the situation requires.

##### **Skin protection**

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU 2016 / 425 and the en 374 standard derived from it.

##### **Body Protection**

Impervious gloves.Impervious protective clothing. Protective boots, if the situation requires.

##### **Respiratory protection**

Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirator approved under appropriate government standards and follow local and national regulations.

##### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	form: Clear Liquid color: Colorless - Almost colorless
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	no data available
f) Initial boiling point and boiling range	185°C (365°F)
g) Flash point	76°C (169°F)
h) Evaporation rate	no data available
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	0.88
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

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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 proper conditions.

**10.3 Possibility of hazardous reactions**

no data available

**10.4 Conditions to avoid**

Open flame

**10.5 Incompatible materials**

Oxidizing agents

**10.6 Hazardous decomposition products**

Carbon dioxide, Carbon monoxide, Silicon oxide

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**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Acute toxicity**

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**

no data available

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**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**

no data available

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**SECTION 12: Ecological information**

**12.1      Toxicity**

no data available

**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**

no data available

**12.6      Other adverse effects**

no data available

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**SECTION 13:**

**13.1      Disposal considerations**

**Product**

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

**Contaminated packaging**

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Disposal of container: Dispose of as unused product. Do not re-use empty containers.

## SECTION 14: Transport information

DOT (US)

UN number: UN1760      Packing group: III      Class: 8  
Proper shipping name: Corrosive liquids,      Reportable Quantity(RQ): no data available      Poison Inhalation Hazard: no data  
n.o.s  
Environmental Hazards: no data available

IMDG

UN number: UN1760      Packing group: III      EMS-No: EmS number: F-A, S-B  
Proper shipping name: Corrosive liquids, n.o.s

IATA

UN number: UN1760      Packing group: III      Class: 8  
Proper shipping name: Corrosive liquids, n.o.s

## **SECTION 15: Regulatory information**

## Toxic Substance Control Act

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

## US Federal Regulations

## SARA 313: Not Listed

## SARA 302: Not Listed

## State Regulations

## Massachusetts Not Listed

## New Jersey Not Listed

## Pennsylvania Not Listed

## Other Information

NFPA Rating: HMIS Classification: Health: 3 Health: 3 Flammability: 2 Flammability: 2 Instability: 0 Physical: 0

## International Inventories

## Canada: NDSL On NDSL

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**SECTION 16: Other information**

**Further information**

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