

## Chemical Safety Data Sheet MSDS / SDS

**TETRAMETHYLTIN**

Revision Date:2026-04-11 Revision Number:1

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name : TETRAMETHYLTIN  
CBnumber : CB1105041  
CAS : 594-27-4  
EINECS Number : 209-833-6  
Synonyms : tetramethyltin,tetramethylstannane

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

**Company Identification**

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 010-86108875

**SECTION 2: Hazards identification****GHS Label elements, including precautionary statements**

Symbol(GHS)



Signal word

Danger

**Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.  
P233 Keep container tightly closed.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

**Hazard statements**

H225 Highly Flammable liquid and vapour  
H410 Very toxic to aquatic life with long lasting effects

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

## Substance

Product name	: TETRAMETHYLTIN
Synonyms	: tetramethyltin,tetramethylstannane
CAS	: 594-27-4
EC number	: 209-833-6
MF	: C4H12Sn
MW	: 178.85

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## SECTION 4: First aid measures

### If inhaled

Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

### In case of skin contact

Take off all contaminated clothing immediately. If on skin, rinse well with water. If skin irritation or rash occurs: Get medical advice/ attention.

### In case of eye contact

Rinse with plenty of water. If easy to do, remove contact lens, if worn. If eye irritation persists: Get medical advice/ attention.

### If swallowed

Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.

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

None known.

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## SECTION 5: Firefighting measures

### Suitable extinguishing media

Dry powder, Foam, Water spray, Carbon dioxide (CO<sub>2</sub>)

### Specific hazards during fire fighting

No information available.

### Specific extinguishing methods

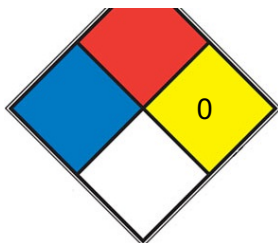
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Immediately evacuate personnel to safe areas. Remove undamaged containers from fire area if it is safe to do so.

### Special protective equipment for fire-fighters

Use personal protective equipment.

### NFPA 704





■ HEALTH

■ FIRE

■ REACT 0 Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, [N<sub>2</sub>](#))

□ SPEC. HAZ.

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## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Wear suitable 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.

### Environmental precautions

Should not be released into the environment.

### Methods and materials for containment and cleaning up

Collect as much of the spill as possible with a suitable absorbent material.

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## SECTION 7: Handling and storage

### Handling

#### Technical measures

Prevent generation of vapor or mist. Take precautionary measures against static discharge. Use explosion-proof equipment.

#### Local/Total ventilation

Ensure adequate ventilation. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Use a local exhaust ventilation.

#### Advice on safe handling

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not subject to grinding, shock or friction. Wash hands and face thoroughly after handling.

#### Avoidance of contact

Oxidizing agents, Strong acids

### Storage

#### Conditions for safe storage

Keep container tightly closed. Store in a cool and shaded area. Keep in a well-ventilated place. Use explosion-proof equipment. Store locked up.

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## SECTION 8: Exposure controls/personal protection

### Ingredients with workplace control parameters

Components	CAS RN	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Tetramethyltin	594-27-4	TWA	0.1 mg/m <sup>3</sup> (Tin)	ACGIH
		STEL	0.2 mg/m <sup>3</sup> (Tin)	ACGIH

Components CAS RN Value type Control parameters Basis (Form of exposure / Permissible concentration)

Tetramethyltin 594-27-4 TWA 0.1 mg/m<sup>3</sup> ACGIH (Tin)

STEL 0.2 mg/m<sup>3</sup> ACGIH (Tin)

### Engineering measures

Install a closed system or local exhaust.

Also install safety shower and eye bath.

### Personal protective equipment

#### Respiratory protection

Gas mask

Self-contained breathing apparatus

#### Eye/face protection

Safety glasses

Safety goggles

Face-shield

#### Skin and body protection

Impervious protective clothing

#### Hand protection

Impervious gloves \*Use personal protective equipment(PPE) approved under appropriate government standards and follow local and national regulations.

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## SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

liquid

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#### Color

colorless

#### Odor

No data available

#### Odor Threshold

No data available

**pH**

No data available

**Melting point/freezing point**

No data available

**Boiling point/boiling range**

76 °C

**Flash point**

-12 °C

**Evaporation rate**

No data available

**Flammability**

No data available

**Upper explosion limit / Upper flammability limit**

No data available

**Lower explosion limit / Lower flammability limit**

1.9 %(V)

**Vapor pressure**

No data available

**Relative vapor density**

6.2

**Relative density**

1.30

**Solubility(ies)****Water solubility**

insoluble

**Solubility in other solvents**

soluble Solvent: Methanol soluble Solvent: Acetone soluble Solvent: Chloroform soluble Solvent: Toluene

**Partition coefficient: n-octanol/water (log value)**

No data available

**Autoignition temperature**

No data available

### **Decomposition temperature**

No data available

### **Viscosity**

#### **Viscosity, dynamic**

No data available

#### **Viscosity, kinematic**

No data available

### **Molecular weight**

178.85 g/mol

### **Physical state**

liquid

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## SECTION 10: Stability and reactivity

### **Reactivity**

No data available

### **Chemical stability**

Stable under normal conditions.

### **Possibility of hazardous reactions**

None under normal processing.

### **Conditions to avoid**

Electrical spark Open flame Electrostatic discharge

### **Incompatible materials**

Oxidizing agents, Strong acids

### **Hazardous decomposition products**

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Metal oxides

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## SECTION 11: Toxicological information

### **Acute toxicity**

### **Product**

### **Acute oral toxicity**

Assessment: The component/mixture is highly toxic after single ingestion.

### **Acute inhalation toxicity**

Assessment: The component/mixture is highly toxic after short term inhalation.

### **Acute dermal toxicity**

Assessment: The component/mixture is highly toxic after single contact with skin.

## **Components**

### **Tetramethyltin**

#### **Acute oral toxicity**

Assessment: The component/mixture is highly toxic after single ingestion.

#### **Acute inhalation toxicity**

LCLo (Mouse): 2,550 mg/m<sup>3</sup> Exposure time: 10 min Test atmosphere: dust/mist Assessment: The component/mixture is highly toxic after short term inhalation.

#### **Acute dermal toxicity**

Assessment: The component/mixture is highly toxic after single contact with skin.

#### **Acute toxicity (other routes of administration)**

LD50 (Mouse): 18 mg/kg Application Route: Intraperitoneal injection

#### **Skin corrosion/irritation**

Classified based on available data. For more details, see section 2.

#### **Serious eye damage/eye irritation**

Classified based on available data. For more details, see section 2.

#### **Respiratory or skin sensitization**

Classified based on available data. For more details, see section 2.

#### **Germ cell mutagenicity**

Classified based on available data. For more details, see section 2.

#### **Carcinogenicity**

Classified based on available data. For more details, see section 2.

#### **Reproductive toxicity**

Classified based on available data. For more details, see section 2.

#### **STOT-single exposure**

Classified based on available data. For more details, see section 2.

### **STOT-repeated exposure**

Classified based on available data. For more details, see section 2.

### **Repeated dose toxicity**

Classified based on available data. For more details, see section 2.

### **Aspiration toxicity**

Classified based on available data. For more details, see section 2.

### **RTECS No.**

WH8630000 (Tetramethyltin)

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## SECTION 12: Ecological information

### **Ecotoxicity**

Product:

#### **Ecotoxicology Assessment**

##### **Acute aquatic toxicity**

Very toxic to aquatic life.

##### **Chronic aquatic toxicity**

Very toxic to aquatic life with long lasting effects.

#### **Components:**

##### **Tetramethyltin:**

#### **Ecotoxicology Assessment**

##### **Acute aquatic toxicity**

Very toxic to aquatic life.

##### **Chronic aquatic toxicity**

Very toxic to aquatic life with long lasting effects.

#### **Persistence and degradability**

No data available

#### **Bioaccumulative potential**

No data available

#### **Mobility in soil**

No data available

#### **Other adverse effects**

No data available

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## SECTION 13: Disposal considerations

### Disposal methods

#### Waste from residues

Disposal in accordance with local and national regulations. Take precautions against ignition or explode. Entrust disposal to a licensed waste disposal company.

#### Contaminated packaging

Disposal in accordance with local and national regulations. Before disposal of used container, remove contents completely.

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## SECTION 14: Transport information

### International Regulations

#### IATA-DGR

Not permitted for transport

#### IMDG-Code

##### UN number

UN 3384

##### Proper shipping name

TOXIC BY INHALATION LIQUID, FLAMMABLE, N.O.S.

##### Class

6.1

##### Subsidiary risk

3

##### Packing group

I

##### EmS Code

F-E, S-D

### Domestic regulation

#### GB 6944/12268

##### UN number

UN 3384

##### Proper shipping name

TOXIC BY INHALATION LIQUID, FLAMMABLE, N.O.S.

##### Class

6.1

##### Subsidiary risk

3

##### Packing group

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## SECTION 15: Regulatory information

### The ingredients of this product are reported in the following inventories

#### **CH BAGREG**

On the inventory, or in compliance with the inventory

#### **TSCA**

All substances listed as active on the TSCA inventory

#### **AICS**

On the inventory, or in compliance with the inventory

#### **DSL**

None of the components of this product are on the Canadian DSL, but all are on the NDSL

Tetramethyltin

#### **ENCS**

Not in compliance with the inventory

#### **ISHL**

On the inventory, or in compliance with the inventory

#### **KECI**

On the inventory, or in compliance with the inventory

#### **PICCS**

On the inventory, or in compliance with the inventory

#### **IECSC**

On the inventory, or in compliance with the inventory

#### **NZIoC**

On the inventory, or in compliance with the inventory

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## SECTION 16: Other information

### **Abbreviations and acronyms**

CAS: Chemical Abstracts Service

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

LD50: Lethal Dose 50%

LC50: Lethal Concentration 50%

EC50: Effective Concentration 50%

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

IMDG: International Maritime Dangerous Goods Code

IATA: International Air Transport Association

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

DOT: US Department of Transportation

NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

**Disclaimer:**

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.