

## SAFETY DATA SHEET

Version 3.10  
Revision Date 06/04/2016  
Print Date 11/14/2018

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1. PRODUCT AND COMPANY IDENTIFICATION

## 1.1 Product identifiers

Product name : Trimethyltin bromide

Product Number : 257915  
Brand : Aldrich  
Index-No. : 050-005-00-7

CAS-No. : 1066-44-0

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

Identified uses : Laboratory chemicals, Synthesis of substances

## 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832  
Fax : +1 800-325-5052

## 1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

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2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Acute toxicity, Oral (Category 2), H300  
Acute toxicity, Inhalation (Category 2), H330  
Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word : Danger

Hazard statement(s)

H300 + H330 : Fatal if swallowed or if inhaled  
H315 : Causes skin irritation.  
H319 : Causes serious eye irritation.  
H410 : Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P260 : Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 : Wash skin thoroughly after handling.

|                    |   |
|--------------------|---|
| P270               | Do not eat, drink or smoke when using this product.   |
| P271               | Use only outdoors or in a well-ventilated area.   |
| P273               | Avoid release to the environment.   |
| P280               | Wear eye protection/ face protection.   |
| P280               | Wear protective gloves.   |
| P284               | Wear respiratory protection.  |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.   |
| P302 + P352        | IF ON SKIN: Wash with plenty of soap and water.   |
| P304 + P340 + P310 | 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. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.                        |
| P332 + P313        | If skin irritation occurs: Get medical advice/ attention.   |
| P337 + P313        | If eye irritation persists: Get medical advice/ attention.  |
| P362               | Take off contaminated clothing and wash before reuse.   |
| P391               | Collect spillage.   |
| P403 + P233        | Store in a well-ventilated place. Keep container tightly closed.  |
| P405               | Store locked up.  |
| P501               | Dispose of contents/ container to an approved waste disposal plant.   |

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

|                  |                                      |
|------------------|--------------------------------------|
| Synonyms         | : Bromotrimethyltin                  |
| Formula          | : C <sub>3</sub> H <sub>9</sub> BrSn |
| Molecular weight | : 243.72 g/mol                       |
| CAS-No.          | : 1066-44-0                          |
| EC-No.           | : 213-916-2                          |
| Index-No.        | : 050-005-00-7                       |

#### Hazardous components

| Component                     | Classification  | Concentration |
|-------------------------------|---|---------------|
| <b>Bromotrimethylstannane</b> |   |               |
|                               | Acute Tox. 2; Skin Irrit. 2; Eye Irrit. 2A; Aquatic Acute 1; Aquatic Chronic 1; H300 + H330, H315, H319, H410 | <= 100 %      |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### **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

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

No data available

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### **5. FIREFIGHTING MEASURES**

#### **5.1 Extinguishing media**

##### **Suitable extinguishing media**

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

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

No data available

#### **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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### **6. ACCIDENTAL RELEASE MEASURES**

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

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

#### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Pick up and arrange disposal without creating dust. 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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### **7. HANDLING AND STORAGE**

#### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

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**

Keep container tightly closed in a dry and well-ventilated place.

Exposure to moisture

Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

#### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **8.1 Control parameters**

**Components with workplace control parameters**

| Component              | CAS-No.   | Value   | Control parameters | Basis  |
|------------------------|-----------|---|--------------------|--|
| Bromotrimethylstannane | 1066-44-0 | TWA   | 0.100000 mg/m3     | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
|                        |           | TWA   | 0.100000 mg/m3     | USA. ACGIH Threshold Limit Values (TLV)  |
|                        | Remarks   | Central nervous system<br>Immune effects<br>Upper Respiratory Tract irritation<br>Headache<br>Eye irritation<br>Nausea<br>Not classifiable as a human carcinogen<br>Danger of cutaneous absorption varies |                    |  |
|                        |           | STEL  | 0.200000 mg/m3     | USA. ACGIH Threshold Limit Values (TLV)  |
|                        |           | Central nervous system<br>Immune effects<br>Upper Respiratory Tract irritation<br>Headache<br>Eye irritation<br>Nausea<br>Not classifiable as a human carcinogen<br>Danger of cutaneous absorption varies |                    |  |
|                        |           | TWA   | 0.100000 mg/m3     | USA. NIOSH Recommended Exposure Limits   |
|                        |           | Also see specific listing for Cyhexatin.<br>Potential for dermal absorption   |                    |  |
|                        |           | TWA   | 0.1 mg/m3          | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
|                        |           | TWA   | 0.1 mg/m3          | USA. ACGIH Threshold Limit Values (TLV)  |
|                        |           | Central nervous system<br>Immune effects<br>Upper Respiratory Tract irritation<br>Headache<br>Eye irritation<br>Nausea<br>Not classifiable as a human carcinogen<br>Danger of cutaneous absorption varies |                    |  |
|                        |           | STEL  | 0.2 mg/m3          | USA. ACGIH Threshold Limit Values (TLV)  |
|                        |           | Central nervous system<br>Immune effects<br>Upper Respiratory Tract irritation<br>Headache<br>Eye irritation<br>Nausea<br>Not classifiable as a human carcinogen<br>Danger of cutaneous absorption varies |                    |  |
|                        |           | TWA   | 0.1 mg/m3          | USA. NIOSH Recommended Exposure Limits   |
|                        |           | Also see specific listing for Cyhexatin.<br>Potential for dermal absorption   |                    |  |

|  |  |      |           |   |
|--|--|------|-----------|---|
|  |  | PEL  | 0.1 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
|  |  | Skin |           |   |
|  |  | STEL | 0.2 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
|  |  | Skin |           |   |

## 8.2 Exposure controls

### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

### Personal protective equipment

#### Eye/face protection

Face shield and safety glasses 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.

#### Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- |   |   |
|---|---|
| a) Appearance                                   | Form: crystalline<br>Colour: gold                   |
| b) Odour  | No data available                                   |
| c) Odour Threshold                              | No data available                                   |
| d) pH   | No data available                                   |
| e) Melting point/freezing point                 | Melting point/range: 26 - 27 °C (79 - 81 °F) - lit. |
| f) Initial boiling point and boiling range      | No data available                                   |
| g) Flash point                                  | 113 °C (235 °F) - closed cup                        |
| 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                       | No data available |
| 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                   | No data available |
| t) Oxidizing properties                   | No data available |

## 9.2 Other safety information

No data available

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## 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, Hydrogen bromide gas, Tin/tin oxides

Other decomposition products - No data available

In the event of fire: see section 5

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

Dermal: No data available

LD50 Intraperitoneal - Mouse - 2.900 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Tremor. Behavioral:Convulsions or effect on seizure threshold.

#### 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

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

No data available

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**

RTECS: WH6747000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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## 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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Very toxic to aquatic life.

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## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

**DOT (US)**

UN number: 3146      Class: 6.1      Packing group: III

Proper shipping name: Organotin compounds, solid, n.o.s.

Reportable Quantity (RQ):

Marine pollutant: yes

Poison Inhalation Hazard: No

#### IMDG

UN number: 3146      Class: 6.1      Packing group: III      EMS-No: F-A, S-A  
Proper shipping name: ORGANOTIN COMPOUND, SOLID, N.O.S. (Bromotrimethylstannane)  
Marine pollutant: yes      Marine pollutant: yes

#### IATA

UN number: 3146      Class: 6.1      Packing group: III  
Proper shipping name: Organotin compound, solid, n.o.s. (Bromotrimethylstannane)

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## 15. REGULATORY INFORMATION

### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Acute Health Hazard

### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

|                        | CAS-No.   | Revision Date |
|------------------------|-----------|---------------|
| Bromotrimethylstannane | 1066-44-0 | 1993-02-16    |

### New Jersey Right To Know Components

|                        | CAS-No.   | Revision Date |
|------------------------|-----------|---------------|
| Bromotrimethylstannane | 1066-44-0 | 1993-02-16    |

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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## 16. OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3.

|                 |                                  |
|-----------------|----------------------------------|
| Acute Tox.      | Acute toxicity                   |
| Aquatic Acute   | Acute aquatic toxicity           |
| Aquatic Chronic | Chronic aquatic toxicity         |
| Eye Irrit.      | Eye irritation                   |
| H300            | Fatal if swallowed.              |
| H300 + H330     | Fatal if swallowed or if inhaled |
| H315            | Causes skin irritation.          |
| H319            | Causes serious eye irritation.   |

### HMIS Rating

|                        |   |
|------------------------|---|
| Health hazard:         | 4 |
| Chronic Health Hazard: |   |
| Flammability:          | 1 |
| Physical Hazard        | 0 |

### NFPA Rating

|                    |   |
|--------------------|---|
| Health hazard:     | 2 |
| Fire Hazard:       | 1 |
| Reactivity Hazard: | 0 |



**Further information**

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**Preparation Information**

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Product Safety – Americas Region  
1-800-521-8956

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