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## **1** Identification

- · Product name
- · Trade name: Trimethyltin bromide, min. 97%
- Item number: 50-3500
- · CAS Number:
- 1066-44-0
- *EC number:* 213-916-2
- Details of the supplier of the safety data sheet
  Manufacturer/Supplier: Strem Chemicals, Inc.
  7 Mulliken Way NEWBURYPORT, MA 01950 USA

info@strem.com

- · Information department: Technical Department
- Emergency telephone number: EMERGENCY: CHEMTREC: + 1 (800) 424-9300 During normal opening times: +1 (978) 499-1600

## 2 Hazard(s) identification

Classification of the substance or mixture GHS06 Skull and crossbones

Acute Tox. 2 H300 Fatal if swallowed. Acute Tox. 2 H310 Fatal in contact with skin. Acute Tox. 2 H330 Fatal if inhaled.

GHS07

Skin Irrit. 2H315Causes skin irritation.Eye Irrit. 2AH319Causes serious eye irritation.STOT SE 3H335May cause respiratory irritation.

· Label elements

· GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



· Signal word Danger

Hazard-determining components of labeling: Trimethyltin bromide, min. 97%
Hazard statements H300+H310+H330 Fatal if swallowed, in contact with skin or if inhaled.

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|   | (Contd. of pa   |
|---|---|
| H315  | Causes skin irritation.   |
| H319  | Causes serious eye irritation.  |
| H335  | May cause respiratory irritation.   |
| · Precautionary   | statements  |
| P231  | Handle under inert gas.   |
| P222  | Do not allow contact with air.  |
| P301+P310   | IF SWALLOWED: Immediately call a POISON CENTER/ doctor.   |
| P305+P351+P   | 338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if pre<br>and easy to do. Continue rinsing. |
| P403+P233   | Store in a well-ventilated place. Keep container tightly closed.  |
| P501  | Dispose of contents/container in accordance with local/regional/national/international  |
|   | regulations.  |
|   | Fire = 0 $Peactivity = 0$ (scale 0 - 4)   |
| -   |   |
|   | Health = 3  |
|   | Fire = 0  |
| REACTIVITY 0  | Reactivity = 0  |
| • Other hazards   |   |
|   | and vPvB assessment   |
| · Results of PBT  |   |
|   | cable.  |
| • <b>Results of PBT</b><br>• <b>PBT:</b> Not appli<br>• <b>vPvB:</b> Not appl |   |

- · Chemical characterization: Substances
- · CAS No. Description
- 1066-44-0 Trimethyltin bromide, min. 97%
- Identification number(s)
- **EC number:** 213-916-2

## 4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product. Remove breathing apparatus only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration. • After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: Do not induce vomiting; immediately call for medical help.

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- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

#### **5** Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

- Inform respective authorities in case of seepage into water course or sewage system.
- *Methods and material for containment and cleaning up:* Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

# 7 Handling and storage

· Handling:

- **Precautions for safe handling** Thorough dedusting.
- *Ensure good ventilation/exhaustion at the workplace.*
- Open and handle receptacle with care.
- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage: Keep cool.
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

- *Recommended storage temperature:* Store at temperatures not exceeding 4 °C.
- Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see item 7.

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|---|
| · Control parameters  |
| • Components with limit values that require monitoring at the workplace: Not required.                                |
| • Additional information: The lists that were valid during the creation were used as basis.                           |
|   |
| Exposure controls   |
| Personal protective equipment:  |
| • General protective and hygienic measures:   |
| Keep away from foodstuffs, beverages and feed.  |
| Immediately remove all soiled and contaminated clothing.  |
| Wash hands before breaks and at the end of work.  |
| Store protective clothing separately.   |
| Avoid contact with the eyes and skin.   |
| · Breathing equipment:  |
| In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use |
| respiratory protective device that is independent of circulating air.   |
| · Protection of hands:  |
|   |
| Protective gloves   |
| Troitenive gioves   |
|   |
| The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.                |
| Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the       |
| chemical mixture.   |
| Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation     |
| · Material of gloves  |
| The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and   |
| varies from manufacturer to manufacturer.   |
| · Penetration time of glove material  |
| The exact break through time has to be found out by the manufacturer of the protective gloves and has to be           |
| observed.   |
| · Eye protection:   |
|   |
|   |
| Tightly sealed goggles  |
|   |
|   |
|   |
| 9 Physical and chemical properties  |
|   |
| · Information on basic physical and chemical properties   |
| · General Information   |
| · Appearance:   |

appearance: Form: Crystalline Color: White · Odor: Irritant · Odor threshold: Not determined. · pH-value: Not applicable. · Change in condition 27 °C (81 °F) Melting point/Melting range: 61 /13 mm °C (142 /55 mm °F) Boiling point/Boiling range:

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| Trade name: | Trimethyltin | bromide, | min. | 97% |
|-------------|--------------|----------|------|-----|
|-------------|--------------|----------|------|-----|

|                                     |   | (Contd. of page |
|-------------------------------------|---|-----------------|
| Flash point:                        | Not applicable.                               |                 |
| · Flammability (solid, gaseous):    | Not determined.                               |                 |
| · Ignition temperature:             |   |                 |
| Decomposition temperature:          | Not determined.                               |                 |
| Auto igniting:                      | Not determined.                               |                 |
| Danger of explosion:                | Product does not present an explosion hazard. |                 |
| Explosion limits:                   |   |                 |
| Lower:                              | Not determined.                               |                 |
| Upper:                              | Not determined.                               |                 |
| Vapor pressure:                     | no data hPa                                   |                 |
| Density:                            | Not determined.                               |                 |
| Relative density                    | Not determined.                               |                 |
| · Vapor density                     | Not applicable.                               |                 |
| Evaporation rate                    | Not applicable.                               |                 |
| Solubility in / Miscibility with    |   |                 |
| Water:                              | Insoluble.                                    |                 |
| Partition coefficient (n-octanol/wa | <b>ter):</b> Not determined.                  |                 |
| Viscosity:                          |   |                 |
| Dynamic:                            | Not applicable.                               |                 |
| Kinematic:                          | Not applicable.                               |                 |
| Solvent content:                    |   |                 |
| Organic solvents:                   | 0.0 %   |                 |
| VOC content:                        | 0.0 g/l / 0.00 lb/gl                          |                 |
| Solids content:                     | 100.0 %                                       |                 |
| Other information                   | No further relevant information available.    |                 |

## **10 Stability and reactivity**

· Reactivity No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## **11 Toxicological information**

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- $\cdot$  on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.

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- $\cdot$  Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)
- Substance is not listed.

·NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

## **12** Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Not known to be hazardous to water.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

## **13 Disposal considerations**

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

• Uncleaned packagings:

• Recommendation: Disposal must be made according to official regulations.

| · UN-Number<br>· DOT, IMDG, IATA             | UN3146  |  |
|--|---|--|
| UN proper shipping name<br>DOT, IATA<br>IMDG | Organotin compounds, solid, n.o.s.<br>ORGANOTIN COMPOUND, SOLID, N.O.S. |  |
| • Transport hazard class(es)                 |   |  |
| DOT  |   |  |
| TOXIC  |   |  |
| Class  | 6.1 Toxic substances  |  |

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|---|---|
| Label   | 6.1   |
| IMDG, IATA  |   |
|   |   |
| Class   | 6.1 Toxic substances                                |
| Label   | 6.1   |
| Packing group<br>DOT, IMDG, IATA                                  | II  |
| Environmental hazards:<br>Marine pollutant:                       | No  |
| Special precautions for user                                      | Not applicable.                                     |
| EMS Number:   | F-A,S-A   |
| Stowage Category  | A   |
| Stowage Code  | SW2 Clear of living quarters.                       |
| Transport in bulk according to Annex MARPOL73/78 and the IBC Code | II of<br>Not applicable.                            |
| Transport/Additional information:                                 |   |
| DOT   |   |
| Quantity limitations  | On passenger aircraft/rail: 25 kg                   |
| ~ .   | On cargo aircraft only: 100 kg                      |
| IMDG  |   |
| Limited quantities (LQ)   | .5kg  |
| Excepted quantities $(\widetilde{EQ})$                            | Code: E4  |
|   | Maximum net quantity per inner packaging: 1 g       |
|   | Maximum net quantity per outer packaging: 500 g     |
| UN "Model Regulation":  | UN 3146 ORGANOTIN COMPOUNDS, SOLID, N.O.S., 6.1, II |

## **15 Regulatory information**

- $\cdot$  Safety, health and environmental regulations/legislation specific for the substance or mixture  $\cdot$  Sara
- Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is not listed.

· Proposition 65

· Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

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- · Chemicals known to cause reproductive toxicity for males:
- Substance is not listed.
- · Chemicals known to cause developmental toxicity:
- Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency)
- Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH)
- Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health)
- Substance is not listed.
- · GHS label elements
- The substance is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms



· Signal word Danger

- · Hazard-determining components of labeling:
- Trimethyltin bromide, min. 97%
- · Hazard statements
- H300+H310+H330 Fatal if swallowed, in contact with skin or if inhaled.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- · Precautionary statements
- P231 Handle under inert gas.
- P222 Do not allow contact with air.
- *P301+P310* IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P403+P233Store in a well-ventilated place. Keep container tightly closed.P501Dispose of contents/container in accordance with local/regional/national/international<br/>regulations.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Technical Department.
- · Contact: Technical Director
- · Date of preparation / last revision 07/30/2016 / -
- Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

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DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Acute Tox. 2: Acute toxicity, Hazard Category 2 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3



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