

# Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 11/10/2008

Reviewed on 11/10/2008

## 1 Identification of substance:

### Product details:

**Product name:** Triphenyltin chloride

**Stock number:** L14289

### Manufacturer/Supplier:

Alfa Aesar, A Johnson Matthey Company  
 Johnson Matthey Catalog Company, Inc.  
 30 Bond Street  
 Ward Hill, MA 01835-8099  
 Emergency Phone: (978) 521-6300  
 CHEMTREC: (800) 424-9300  
 Web Site: [www.alfa.com](http://www.alfa.com)

**Information Department:** Health, Safety and Environmental Department

### Emergency information:

During normal hours the Health, Safety and Environmental Department.  
 After normal hours call Chemtrec at (800) 424-9300.

## 2 Composition/Data on components:

### Chemical characterization:

#### Description: (CAS#)

Triphenyltin chloride (CAS# 639-58-7), 100%

#### Identification number(s):

**EINECS Number:** 211-358-4

**Index number:** 050-011-00-X

## 3 Hazards identification

### Hazard description:



T Toxic

N Dangerous for the environment

### Information pertaining to particular dangers for man and environment

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

### Classification system

#### HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH	2
FIRE	1
REACTIVITY	1

Health (acute effects) = 2

Flammability = 1

Reactivity = 1

## 4 First aid measures

### General information

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing has been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

(Contd. on page 2)

# Material Safety Data Sheet

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**Product name: Triphenyltin chloride**

(Contd. of page 1)

**After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

**After skin contact**

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

**After eye contact**

Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing**

Do not induce vomiting; immediately call for medical help.

Seek immediate medical advice.

## 5 Fire fighting measures

**Suitable extinguishing agents**

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards caused by the material, its products of combustion or resulting gases:**

In case of fire, the following can be released:

Hydrogen chloride (HCl)

Carbon monoxide and carbon dioxide

Metal oxide fume

**Protective equipment:**

Wear self-contained respirator.

Wear fully protective impervious suit.

## 6 Accidental release measures

**Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

**Measures for environmental protection:**

Do not allow material to be released to the environment without proper governmental permits.

**Measures for cleaning/collecting:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

**Additional information:**

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****Information for safe handling:**

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Open and handle container with care.

(Contd. on page 3)

**Material Safety Data Sheet**  
acc. to OSHA and ANSI

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Reviewed on 11/10/2008

**Product name: Triphenyltin chloride**

(Contd. of page 2)

**Information about protection against explosions and fires:**

Keep ignition sources away.

**Storage****Requirements to be met by storerooms and receptacles:**

No special requirements.

**Information about storage in one common storage facility:**

Do not store together with acids.

Store away from oxidizing agents.

**Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

**8 Exposure controls and personal protection****Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

**Components with limit values that require monitoring at the workplace:**

Tin, organic compounds, as Sn

mg/m<sup>3</sup>

ACGIH TLV	0.1; 0.2-STEL (skin)
	Not classifiable as a human carcinogen
Austria MAK	0.1 (skin)
Belgium TWA	0.1 (skin)
Denmark TWA	0.1 (skin)
Finland TWA	0.1; 0.3-STEL (skin)
France VME	0.1
Germany MAK	0.1 (skin)
Hungary	0.1-STEL (skin)
Korea TLV	0.1; 0.2-STEL (skin)
Norway TWA	0.1
Switzerland MAK-W	0.1; 0.2-KZG-W (skin)
United Kingdom	0.1; 0.2-STEL (skin)
USA PEL	0.1

**Additional information:** No data**Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

**Breathing equipment:**

Use suitable respirator when high concentrations are present.

**Protection of hands:** Impervious gloves**Eye protection:** Safety glasses**Body protection:** Protective work clothing.

USA

(Contd. on page 4)

# Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 11/10/2008

Reviewed on 11/10/2008

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(Contd. of page 3)

## 9 Physical and chemical properties:

General Information	
<b>Form:</b>	Solid
<b>Color:</b>	White
<b>Odor:</b>	Characteristic
<b>Change in condition</b>	
<b>Melting point/Melting range:</b>	106°C (223°F)
<b>Boiling point/Boiling range:</b>	249°C (480°F) (13.5mm Hg)
<b>Sublimation temperature / start:</b>	Not determined
<b>Flash point:</b>	Not applicable
<b>Ignition temperature:</b>	Not determined
<b>Decomposition temperature:</b>	Not determined
<b>Danger of explosion:</b>	Product does not present an explosion hazard.
<b>Explosion limits:</b>	
<b>Lower:</b>	Not determined
<b>Upper:</b>	Not determined
<b>Vapor pressure:</b>	Not determined
<b>Density at 20°C (68°F):</b>	0.9 g/cm <sup>3</sup>
<b>Solubility in / Miscibility with Water:</b>	
	Soluble

## 10 Stability and reactivity

**Thermal decomposition / conditions to be avoided:**

Decomposition will not occur if used and stored according to specifications.

**Materials to be avoided:**

Acids

Oxidizing agents

**Dangerous reactions** No dangerous reactions known

**Dangerous products of decomposition:**

Hydrogen chloride (HCl)

Carbon monoxide and carbon dioxide

Metal oxide fume

## 11 Toxicological information

**Acute toxicity:**

**LD/LC50 values that are relevant for classification:**

Oral	LD50	210 mg/kg (chicken)
		18 mg/kg (mouse)
		135 mg/kg (rat)

**Primary irritant effect:**

**on the skin:** Irritant to skin and mucous membranes.

**on the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

(Contd. on page 5)

# Material Safety Data Sheet

acc. to OSHA and ANSI

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(Contd. of page 4)

**Other information (about experimental toxicology):**

Mutagenic effects have been observed on tests with laboratory animals.  
Reproductive effects have been observed on tests with laboratory animals.

**Subacute to chronic toxicity:**

Organic tin compounds are generally more toxic than inorganic tin.  
Exposure may result in brain and central nervous system swelling, muscle weakness, paralysis, respiratory failure, neurological disturbances, liver damage, urinary tract injury and blood injury. Excessive exposure may be fatal.

**Additional toxicological information:**

Danger through skin absorption.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

ACGIH A4: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.

**12 Ecological information:****Ecotoxicological effects:**

**Remark:** Very toxic for fish

**General notes:**

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Do not allow material to be released to the environment without proper governmental permits.

Very toxic for aquatic organisms

**13 Disposal considerations****Product:****Recommendation**

Consult state, local or national regulations to ensure proper disposal.

**Uncleaned packagings:**

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

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

**14 Transport information****DOT regulations:**

<b>Hazard class:</b>	6.1
<b>Identification number:</b>	UN3146
<b>Packing group:</b>	III

(Contd. on page 6)

**Material Safety Data Sheet**  
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**Product name: Triphenyltin chloride**

(Contd. of page 5)

**Proper shipping name (technical name):**

ORGANOTIN COMPOUND, SOLID, N.O.S.  
(Triphenyltin chloride)

**Label**

6.1

**Land transport ADR/RID (cross-border)**



**ADR/RID class:**

6.1 (T3) Toxic substances

**Danger code (Kemler):**

60

**UN-Number:**

3146

**Packaging group:**

III

**Description of goods:**

3146 ORGANOTIN COMPOUND, SOLID, N.O.S.  
(Triphenyltin chloride)

**Maritime transport IMDG:**



**IMDG Class:**

6.1

**UN Number:**

3146

**Label**

6.1

**Packaging group:**

III

**Proper shipping name:**

ORGANOTIN COMPOUND, SOLID, N.O.S.  
(Triphenyltin chloride)

**Air transport ICAO-TI and IATA-DGR:**



**ICAO/IATA Class:**

6.1

**UN/ID Number:**

3146

**Label**

6.1

**Packaging group:**

III

**Proper shipping name:**

ORGANOTIN COMPOUND, SOLID, N.O.S.  
(Triphenyltin chloride)

## 15 Regulations

**Product related hazard informations:**

**Hazard symbols:**

T Toxic

N Dangerous for the environment

**Risk phrases:**

23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

(Contd. on page 7)

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(Contd. of page 6)

**Safety phrases:**

- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.
- 45 In case of accident or if you feel unwell, seek medical advice immediately.
- 60 This material and its container must be disposed of as hazardous waste.
- 61 Avoid release to the environment. Refer to special instructions/ Safety data sheets

**National regulations**

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

**Information about limitation of use:**

For use only by technically qualified individuals.

**16 Other information:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Department issuing MSDS:** Health, Safety and Environmental Department.

**Contact:** Paul V. Connolly