Material Safety Data Sheet

Version 3.0
Revision Date 12/28/2008
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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Trimethyltin chloride

Product Number : 146498
Brand : Aldrich

Company : Sigma-Aldrich Canada, Ltd
2149 Winston Park Drive
OAKVILLE ON L6H 6J8
CANADA
Telephone : +1 9058299500
Fax : +1 9058299292
Emergency Phone # : 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C_3H_9ClSn
Molecular Weight : 199.27 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Trimethyltin chloride			
1066-45-1	213-917-8	050-005-00-7	-

3. HAZARDS IDENTIFICATION

Emergency Overview

Target Organs

Brain., Central nervous system, Liver, Kidney, Cardiovascular system., Lungs

WHMIS Classification

D1A Very Toxic Material Causing Immediate and Serious Toxic Effects

Highly toxic by ingestion
Highly toxic by skin absorption
Highly toxic by inhalation

HMIS Classification

Health Hazard: 4
Chronic Health Hazard: *
Flammability: 1
Physical hazards: 0

Potential Health Effects

Inhalation May be fatal if inhaled. May cause respiratory tract irritation.
Skin May cause skin irritation. May be fatal if absorbed through skin.
Eyes May cause eye irritation.
Ingestion May be fatal if swallowed.

4. 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.

5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point	97 °C (207 °F) - closed cup
Ignition temperature	no data available

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

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear respiratory protection. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

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.

Methods for cleaning up
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

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

Moisture sensitive.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis

Trimethyltin chloride	1066-45-1	STEL	0.2 mg/m3	2004-04-30	Canada. Occupational Health and Safety Code 218
Remarks	Substance may be readily absorbed through intact skin				
		TWA	0.1 mg/m3	2004-04-30	Canada. Occupational Health and Safety Code 218
	Substance may be readily absorbed through intact skin				
		TWA	0.1 mg/m3	2000-01-12	Canada. Act Respecting Occupational Health and Safety [R.S.Q., c.2.1], Regulation respecting Occupational Health and Safety (O.C.885-2001), Division XV, Sections 130-14
	SKIN (percutaneous) : The designation "Pc" in the Designation and remarks column refers to the potentially significant contribution to the overall exposure by the cutaneous route. Exposure is by contact with vapours or, of probable greater significance, by direct skin contact with the substance. The cutaneous route includes mucous membranes and the eyes.				
		STEL	0.2 mg/m3	2000-01-12	Canada. Act Respecting Occupational Health and Safety [R.S.Q., c.2.1], Regulation respecting Occupational Health and Safety (O.C.885-2001), Division XV, Sections 130-14
	SKIN (percutaneous) : The designation "Pc" in the Designation and remarks column refers to the potentially significant contribution to the overall exposure by the cutaneous route. Exposure is by contact with vapours or, of probable greater significance, by direct skin contact with the substance. The cutaneous route includes mucous membranes and the eyes.				
		TWA	0.1 mg/m3	2005-02-03	Canada. Occupational Health and Safety Act [R.S.O. 1990, c.1], Industrial Establishments (R.R.O. 1990, Reg 851),139
	The notation "skin" following the name of an agent in this Schedule indicates that direct or airborne contact with the agents may result in significant absorption of the agent through the skin, mucous membranes or eyes. Vehicles, such as certain solvents, may enhance the rate of skin absorption. Inclusion of this notation is intended to suggest that preventative action should be taken against absorption of the agent through the skin, mucous membranes or eyes.				
		TWA	0.1 mg/m3	2004-08-01	Canada. Worker's

					Compensation Act, Occupational Health and Safety Regulations (BC Reg 296/97 as amended), 7.2 [B.C. Reg. 382/2004, s.1]
	The term "skin" identifies substances that contribute significantly to the overall exposure by the skin route.				
		STEL	0.2 mg/m3	2004-08-01	Canada. Worker's Compensation Act, Occupational Health and Safety Regulations (BC Reg 296/97 as amended), 7.2 [B.C. Reg. 382/2004, s.1]
	The term "skin" identifies substances that contribute significantly to the overall exposure by the skin route.				

Personal protective equipment

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (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).

Hand protection
Handle with gloves.

Eye protection
Safety glasses

Skin and body protection
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	crystalline
Colour	white

Safety data

pH	no data available
Melting point	37 - 39 °C (99 - 102 °F)
Boiling point	no data available
Flash point	97 °C (207 °F) - closed cup
Ignition temperature	no data available

Lower explosion limit	no data available
Upper explosion limit	no data available
Water solubility	no data available

10. STABILITY AND REACTIVITY

Storage stability
Stable under recommended storage conditions.

Materials to avoid
Strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, Tin/tin oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - rat - 12.6 mg/kg
Remarks: Behavioral:Tremor. Behavioral:Excitement. Behavioral:Aggression.

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

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.

Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

Potential Health Effects

Inhalation	May be fatal if inhaled. May cause respiratory tract irritation.
Skin	May cause skin irritation. May be fatal if absorbed through skin.
Eyes	May cause eye irritation.
Ingestion	May be fatal if swallowed.
Target Organs	Brain., Central nervous system, Liver, Kidney, Cardiovascular system., Lungs,

Additional Information
RTECS: WH6850000

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Bioaccumulation	Cyprinodon sp. (minnow) - 45 d

Bioconcentration factor (BCF): 375

Ecotoxicity effects

Toxicity to fish	LC50 - Oryzias latipes - 5.62 mg/l - 48 h
Toxicity to daphnia and other aquatic invertebrates.	EC50 - Daphnia magna (Water flea) - 0.47 mg/l - 24 h
Toxicity to algae	Growth inhibition EC50 - Skeletonema costatum - 0.214 mg/l - 72 h

Further information on ecology

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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

13. DISPOSAL CONSIDERATIONS

Product
Observe all federal, state, and local environmental regulations. 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.

14. TRANSPORT INFORMATION

DOT (US)
UN-Number: 3146 Class: 6.1 Packing group: II
Proper shipping name: Organotin compounds, solid, n.o.s.
Marine pollutant: Severe marine pollutant
Poison Inhalation Hazard: No

IMDG
UN-Number: 3146 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: ORGANOTIN COMPOUND, SOLID, N.O.S. (Trimethyltin chloride)
Marine pollutant: Severe marine pollutant

IATA
UN-Number: 3146 Class: 6.1 Packing group: II
Proper shipping name: Organotin compound, solid n.o.s. (Trimethyltin chloride)

15. REGULATORY INFORMATION

DSL Status
This product contains the following components listed on the Canadian NDSL list. All other components are on the Canadian DSL list.

	CAS-No.
Trimethyltin chloride	1066-45-1

WHMIS Classification

D1A	Very Toxic Material Causing Immediate and Serious Toxic Effects	Highly toxic by ingestion Highly toxic by skin absorption Highly toxic by inhalation

16. OTHER INFORMATION

Further information