

# Stannous Chloride, Dihydrate

# **SECTION 1. IDENTIFICATION**

Product Identifier Stannous Chloride, Dihydrate

Other Means of Tin (II) Chloride, Tin dichloride, Tin protochloride

Identification

Product Code(s) ST1010, ST1020
Product Family Inorganic Solid

Recommended Use Laboratory and industrial use.

Restrictions on Use None known.

Supplier Identifier Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995

Emergency Phone No. CANUTEC CANADA, 613-996-6666, 24 Hours

SDS No. 0573

## **SECTION 2. HAZARD IDENTIFICATION**

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

#### Classification

Acute toxicity (Oral) - Category 4; Skin corrosion - Category 1; Serious eye damage - Category 1

#### **Label Elements**





Signal Word: Danger

Hazard Statement(s):

Harmful if swallowed.

Causes severe skin burns and eye damage.

Precautionary Statement(s):

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands and skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of water/

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a POISON CENTRE or doctor.

Storage:

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Store in a well-ventilated place. Keep cool.

Store locked up.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

#### Other Hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance:

Chemical Name	CAS No.	%	Other Identifiers
Tin(II) chloride, dihydrate (1:2:2)	10025-69-1	> 98	Stannous Chloride Dihydrate, Tin dichloride, Tin protochloride

#### **SECTION 4. FIRST-AID MEASURES**

#### First-aid Measures

#### Inhalation

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor.

#### Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes.

#### **Eye Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Immediately call a Poison Centre or doctor.

#### Ingestion

Rinse mouth with water. Do not induce vomiting. If vomiting occurs, have person lie on side in the recovery position. Rinse mouth with water again. Immediately call a Poison Centre or doctor.

#### **First-aid Comments**

Some of the first-aid procedures recommended here require advanced first-aid training. Get medical advice or attention if you feel unwell or are concerned.

## Most Important Symptoms and Effects, Acute and Delayed

If on skin: may burn the skin. Permanent scarring may result. If in eyes: may cause serious eye damage. May irritate or burn the eyes. Permanent damage including blindness may result.

# **Immediate Medical Attention and Special Treatment**

#### Special Instructions

General advice

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

## SECTION 5. FIRE-FIGHTING MEASURES

# **Extinguishing Media**

# Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire. Use water to keep non-leaking, fire-exposed containers cool.

#### Unsuitable Extinguishing Media

Do not use a solid (straight) water stream as it may scatter and spread fire.

# Specific Hazards Arising from the Product

Heating increases the release of toxic vapour. Closed containers may rupture violently when heated releasing contents.

In a fire, the following hazardous materials may be generated: corrosive chlorine; corrosive hydrogen chloride. Tin

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Oxides.

## Special Protective Equipment and Precautions for Fire-fighters

Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles. Dike and recover contaminated water for appropriate disposal.

A full-body encapsulating chemical protective suit with positive pressure SCBA may be necessary.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

# Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

#### **Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway.

## Methods and Materials for Containment and Cleaning Up

Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

Small spills or leaks: contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

Large spills or leaks: dike spilled product to prevent runoff. Contain spill with earth, sand, or absorbent material which does not react with spilled material. Place used absorbent into suitable, covered, labelled containers for disposal. Flush spill area.

## SECTION 7. HANDLING AND STORAGE

## Precautions for Safe Handling

Only use where there is adequate ventilation. Wear personal protective equipment to avoid direct contact with this chemical. Prevent accidental contact with incompatible chemicals. Keep containers tightly closed when not in use or empty. Wash hands thoroughly after handling this material.

## Conditions for Safe Storage

Store in an area that is: well-ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity). Store in the original, labelled, shipping container.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Tin(II) chloride, dihydrate (1:2:2)	2 mg/m3		Not established			

#### Appropriate Engineering Controls

General ventilation is usually adequate. Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

#### **Individual Protection Measures**

#### Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

## **Skin Protection**

Wear chemical protective clothing e.g. gloves, aprons, boots.

No specific guidelines are available. Contact chemical manufacturer/supplier for advice.

#### Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Basic Physical and Chemical Properties** 

Appearance White crystals.

Odour Odourless

Odour Threshold Not applicable
pH Not available

Melting Point/Freezing Point 38 °C (100 °F) (melting); 38 °C (100 °F) (freezing)

Initial Boiling Point/Range 623 °C (1153 °F)
Flash Point Not applicable
Evaporation Rate Not available
Flammability (solid, gas) Will not burn.

Upper/Lower Flammability or

Explosive Limit

Not applicable (upper); Not applicable (lower)

Vapour PressureNot availableVapour Density (air = 1)Not applicableRelative Density (water = 1)2.63 at 25 °C

**Solubility** Very soluble in water; Highly soluble in alcohols (e.g. ethanol).

Partition Coefficient, -2.47

n-Octanol/Water (Log Kow)

Auto-ignition Temperature Not applicable

Decomposition Temperature Not available

Viscosity Not applicable (kinematic); Not applicable (dynamic)

Other Information

Physical State Solid

## **SECTION 10. STABILITY AND REACTIVITY**

#### Reactivity

Not reactive under normal conditions of use.

# Chemical Stability

Normally stable.

## Possibility of Hazardous Reactions

None known.

#### **Conditions to Avoid**

Water, moisture or humidity. High temperatures. Incompatible materials.

#### Incompatible Materials

Strong bases (e.g. sodium hydroxide), strong oxidizing agents (e.g. perchloric acid).

# **Hazardous Decomposition Products**

Corrosive hydrogen chloride. tin oxides corrosive chlorine.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

# Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

#### **Acute Toxicity**

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Tin(II) chloride, dihydrate	Not available	> 756 mg/kg (female rat)	Not available

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(1:2:2)

## Skin Corrosion/Irritation

May burn the skin. Permanent scarring may result.

## Serious Eye Damage/Irritation

Causes serious eye damage based on skin corrosion information.

## STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

May cause nose and throat irritation.

#### Ingestion

May cause severe irritation or burns to the mouth, throat and stomach.

## **Aspiration Hazard**

Not known to be an aspiration hazard.

## STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

# Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

# Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Tin(II) chloride, dihydrate (1:2:2)	Not evaluated	Not designated	Not Listed	

#### Reproductive Toxicity

# **Development of Offspring**

Not known to harm the unborn child.

## Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

#### Effects on or via Lactation

No information was located.

#### Germ Cell Mutagenicity

No information was located.

## Interactive Effects

No information was located.

# SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

# **SECTION 13. DISPOSAL CONSIDERATIONS**

## **Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations.

## **SECTION 14. TRANSPORT INFORMATION**

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	UN3260	Corrosive solid, acidic, inorganic, n.o.s. (STANNOUS CHLORIDE)	8	ĬĬĬ

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IATA (Air)	UN3260	Corrosive solid, acidic, inorganic, n.o.s. (STANNOUS CHLORIDE)	8	III
IMO (Marine)	UN3260	Corrosive solid, acidic, inorganic, n.o.s. (STANNOUS CHLORIDE)	8	III

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

# **SECTION 15. REGULATORY INFORMATION**

## Safety, Health and Environmental Regulations

#### Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Listed on the DSL. Listed on the NDSL.

#### USA

Toxic Substances Control Act (TSCA) Section 8(b)

Listed on the TSCA Inventory.

# **SECTION 16. OTHER INFORMATION**

SDS Prepared By
Phone No.
(905)-821-2995
Date of Preparation
Date of Last Revision
June 15, 2016
June 16, 2016

References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).

**Disclaimer** This document is offered only as a guide in the safe handling of the above product, and has

been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or

reliance on any information herein.

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