RCI Labscan Limited

SAFETY DATA SHEET

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
Revision Date Sep 01, 2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name	STANNOUS (II) CHLORIDE DIHYDRATE
CAS-No.	10025-69-1
Product code	AR1179

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

Identified uses	Chemical for analysis and production.

1.3 Details of the supplier of the safety data sheet

Company	RCI LABSCAN LIMITED. 24 Rama 1 Road, Pathumwan, Bangkok 10330 Thailand
Telephone number	(662) 613-7911-4
Fax number	(662) 613-7915

1.4 Emergency Telephone Number

Emergency phone	(662) 613-7911-4

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Corrosive to Metals (Category 1), H290
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Skin sensitisation (Category 1), H317
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Specific target organ toxicity - repeated exposure (Category 2), H373
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 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word	Danger

Hazard statement(s)

H290	May be corrosive to metals.
H302 + H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H373	May cause damage to organs (Cardio-vascular system) through prolonged or repeated exposure.

H410	Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P234	Keep only in original packaging.
P260	Do not breathe dusts.
P264	Wash hand thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P317	IF SWALLOWED: Get medical help.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302 + P361 + P354	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P354 + P338	IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P316	Get emergency medical help immediately.
P330	Rinse mouth.
P333 + P317	If skin irritation or rash occurs: Get medical help.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P406	Store in corrosive resistant/ container with a resistant inner liner.

2.3 Other hazards None

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms Tin(II) chloride dihydrate, Stannic chloride, Stannochlor.

CAS-No	EC-No	EC-Index-No	Formula	Molecular Weight	Weight %
10025-69-1	231-868-0	-	$SnCl_2.2H_2O$	225.63 g/mol	>98

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Concentration	Classification
Stannous (II) chloride dihydrate		
CAS-No 10025-69-1 EC-No 231-868-0 EC-Index-No -	>98%	Corrosive to Metals (Category 1), H290 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Skin corrosion (Category 1B), H314 Serious eye damage (Category 1), H318 Skin sensitisation (Category 1), H317 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335 Specific target organ toxicity - repeated exposure (Category 2), H373 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

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Move to fresh air in case of accidental inhalation of dust.
Skin contact	Remove contaminated clothing and wash affected skin with soap and water.
Eye contact	If the substance has got into the eyes, immediately wash out with plenty of water at least 15 minutes. Obtain medical attention.
Ingestion	Rinse mouth. After swallowing make victim drink water (two glasses at the most), call in physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2.2 and section 11

4.3 Indication of any immediate medical attention and special treatment needed

Not Available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

In adaption to materials stored in the immediate neighborhood.

5.2 Special hazards arising from the substance or mixture

Non-combustible. Ambient fire may liberate hazardous vapors. The following may develop in event of fire: hydrochloric acid, chlorine, tin, tin oxides.

5.3 Advice for firefighters

Do not stay in dangerous zone without self-contained breathing apparatus. Avoid contact with skin and wear suitable protective clothing.

5.4 Further information

Contain escaping vapors with water. Prevent fire-fighting water from entering surface water or ground water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid generation of dusts; do not inhale dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protective equipment see **Section 8**.

6.2 Environmental precautions

Do not allow to enter drinking water and sewerage system.

6.3 Methods and materials for containment and cleaning up

Carefully sweep up, gather and remove. Avoid generation of dusts. Keep in suitable, closed containers for disposal. Clean up affected area.

6.4 Reference to other sections

For disposal see **Section 13**.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of good ventilation in the working area. Do not leave container open. Avoid spillage. Avoid rising dust.

7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed in a dry, cool and well-ventilated place. Keep out of direct sunlight and away from heat, water, moisture and incompatible materials.

7.3 Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

The product should only be used in ventilation hoods and fans.

Individual protection measures (Personal protective equipment, PPE)

Eye/face protection

Goggles giving complete protection to eyes.

Skin protection

Chemical resistant apron / flame retardant antistatic protective clothing, heavy duty work shoes.

Handle with gloves

- Full contact wears gloves from nitrile rubber material.
- Splash contact wears gloves from nitrile rubber material.

The select protective gloves have to satisfy the specifications of EU Directive 89/686 EEC and standard EN 374 derived from it.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Required when dusts are generated filter B-(P2) (EN 143) or use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls

Prevent liquid entering sewers, basements and workpits.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Form	Solid
: Color	White
Odour	Odorless
Odour Threshold	Not Available
pH	~1- 2 at 100 g/l H_2O at 20ºC
Melting point/range	38 °C
Boiling point/range	623 °C (anhydrous substance)
Flash point	Not Available
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Explosion limits: lower	Not Available
upper	Not Available

Vapor Pressure	Not Available
Relative Vapor Density	Not Available
Density	2.71 g/cm^3 at 20ºC
Bulk density:	~1250 kg/m^3
Water solubility	1187 g/l at 20ºC
Partition coefficient (n-octanol/water)	Not Available
Auto-Ignition temperature	Not Available
Decomposition Temperature	Not Available
Viscosity	Not Available
Explosive properties	Not Explosive
Oxidizing properties	The substance or mixture is not classified as oxidizing.

SECTION 10: Stability and reactivity

10.1 Reactivity

Hygroscopic.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Risk of explosion in contact with sodium, strong oxidizing agents, hydrazine, hydrazine hydrate, metal nitrates.

The substance can react dangerously with bromine, hydrogen peroxide, bromine trifluoride, calcium carbide (rare), ethylene oxide, potassium dioxide.

10.4 Conditions to avoid

Heating.

10.5 Incompatible materials

Strong oxidizing agents, halogen-halogen compounds, carbides, hydrazine and derivatives, nitrates, alkali metals, hydrogen peroxide, water.

10.6 Hazardous decomposition products

Hydrochloric acid, chlorine, tin, tin oxides (Hazardous decomposition products from under fire condition).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD_{50} (oral, rat): 700 mg/kg (anhydrous substance).
LC_{50} (Inhalation, rat): 2 mg/l/4h (anhydrous substance).

Acute oral toxicity

Symptoms: the mucous membranes in mouth, pharynx, oesophagus and gastrointestinal tract, nausea, vomiting.

Acute inhalation toxicity

Symptoms: irritations of the mucous membranes, coughing and dyspnoea.

Skin corrosion/irritation

Causes burns.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization
Sensitization test (human) is positive.

Germ cell mutagenicity
Bacterial mutagenicity: Ames test is negative.

Carcinogenicity
Not Available

Reproductive toxicity
Not Available

Teratogenicity
Not Available

Specific target organ toxicity (STOT) - single exposure
Not Available

Specific target organ toxicity (STOT) - repeated exposure
Not Available

Aspiration hazard
Not Available

Further information
Metal-fume fever after inhalation of large quantities.
The product should be handled with the care usual when dealing with chemicals.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to algae	IC_{50} Sc.quadricauda: <10 mg/l/72 h (anhydrous substance).

12.2 Persistence and degradability

Biodegradability	Method for the determination of biodegradability is not applicable to inorganic substance.

12.3 Bioaccumulative potential

Partition coefficient (n-octanol/water)	Not Available

12.4 Mobility in soil
Not Available

12.5 Other adverse effects
Biological effects; Harmful effect due to pH shift.
Do not allow to enter waters, waste water or soil.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product
There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding law and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste or burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly

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

Contaminated packaging
Disposal in compliance with official regulations. Handle contaminated packaging as hazardous waste in the same way of the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

SECTION 14: Transport information

Land Transport (ADR/RID)

UN Number	3260
UN proper shipping name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (STANNOUS CHLORIDE DIHYDRATE)
Transport hazard class(es)	8
Packing group	II
Environmental hazards	Yes
Special precautions for user	Yes

Sea transport (IMDG)

UN Number	3260
UN proper shipping name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (STANNOUS CHLORIDE DIHYDRATE)
Transport hazard class(es)	8
Packing group	II
Marine pollutant	Yes
Special precautions for user	Yes
EmS	F-A S-B

Air transport (IATA)

UN Number	3260
UN proper shipping name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (STANNOUS CHLORIDE DIHYDRATE)
Transport hazard class(es)	8
Packing group	II
Environmental hazards	Yes
Special precautions for user	No

River transport (AND/ADNR)
(Not examined)

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Not Available

15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

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

H290	May be corrosive to metals.

H302 + H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H373	May cause damage to organs (Cardio-vascular system) through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Recommended restrictions
Take notice of labels and safety data sheets for the working.

Reference
Globally Harmonized System of Classification and Labelling of Chemicals (GHS).
Labelling according to EC Directives 67/548 EEC and Regulation (EC) No 1272/2008.
Transportation information according to Recommendations on the Transport of Dangerous Goods, Model Regulations. Twelfth revised edition. United Nations.
Institute for Occupational Safety and Health of the German Social Accident Insurance in Sankt Augustin/Germany, Source: IFA for Databases on hazardous substances (GESTIS).

Further information
Contact to RCI Labscan Limited.

Revision Date
01/09/2021