


## Material Safety Data Sheet

### Section 1 – Product and Company Identification

<b>Product Name</b>	Stannous Chloride Anhydrous
<b>Chemical Name</b>	Tin(II) Chloride Anhydrous
<b>Chemical Formula</b>	SnCl <sub>2</sub>
<b>Company Identification</b>	Showa Kako Corporation 18-23, Yoshino-cho, Suita-city, Osaka 564-0054 JAPAN
<b>Telephone Number</b>	+81-6-6384-1501
<b>24-hour Emergency Telephone Number</b>	+81-6-6384-1501
<b>Fax Number</b>	+81-6-6384-2287

### Section 2 – Hazards Information

<b>Inhalation</b>	Dust from the product, if present, may cause respiratory information following an excessive inhalation exposure.	
<b>Skin</b>	May produce skin irritation.	
<b>Eyes</b>	May cause eye irritation.	
<b>Ingestion</b>	Not expected to present a significant ingestion hazards under anticipated condition of normal use.	
<b>GHS Classification</b>		
<b>Physical Hazards</b>	Not classified	
<b>Health Hazards</b>		
<b>Acute toxicity (oral)</b>	Category 5	
<b>Serious eye damage/ eye irritation</b>	Category 2A-2B	
<b>Specific target organs/ systemic toxicity following single exposure</b>	Category 3(Respiratory tract irritation)	
<b>Specific target organs/ systemic toxicity following repeated exposure</b>	Category 1(Lungs)	
<b>Environmental Hazards</b>		
<b>Hazardous to the aquatic environment (acute)</b>	Category 1	
<b>Hazardous to the aquatic environment (chronic)</b>	Category 1	
<b>GHS Symbol</b>		
<b>Signal Word</b>	Danger	

<b>Hazard Statements</b>	
H303	May be harmful if swallowed
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H372	Causes damage to organs through prolonged or repeated exposure (Lungs)
H400	Very toxic to aquatic life
<b>Precautionary Statements</b>	
<b>Prevention Statements</b>	
P264	Wash hand and face, etc. thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
<b>Response Statements</b>	
P312	Call a POISON CENTER or doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/ attention.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P314	Get medical advice/ attention if you feel unwell.
P391	Collect spillage.
<b>Storage Statements</b>	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
<b>Disposal Statements</b>	
P501	Dispose of contents/ container through a waste management company authorized by the local government.

### Section 3 – Composition and Information on Ingredients

<b>Substance/Mixture</b>	Substance
<b>Chemical Name</b>	Tin(II) Chloride Anhydrous
<b>CAS #</b>	7772-99-8

<b>Percent</b>	98.5% min.
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#### Section 4 – First Aid Measures

<b>Eyes</b>	Immediately flush eyes with copious amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Consult with ophthalmologist.
<b>Skin</b>	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Consult with a physician if symptoms occur.
<b>Ingestion</b>	Immediately wash mouth with plenty of water and give 1 - 2 cupfuls of milk or water if victim is conscious and alert. Consult with a physician.
<b>Inhalation</b>	Remove to fresh air, wash out nasal aperture and mouth with plenty of water. If breathing is difficult, give artificial respiration. If not breathing, give oxygen. Consult with a physician.

#### Section 5 – Fire Fighting Measures

<b>Flash Point</b>	No data found	
<b>Autoignition</b>	None	
<b>Explosion Limits</b>	<b>Lower</b>	No data found
	<b>Upper</b>	No data found
<b>Extinguish Media</b>	Water, powder, carbon dioxide, foam	
<b>Firefighting Instructions</b>	Avoid non-firefighting equipped personnel to enter. Extinguish upwind from the fire wearing appropriate protective gear.	

#### Section 6 – Accidental Release Measures

<b>Spills/ Leaks</b>	Evacuate area. Provide adequate ventilation. Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Do not contact with skin. Do not inhale. Wash spill site after material pickup is complete.
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#### Section 7 – Handling and Storage

<b>Handling</b>	Wear appropriate protective gear. Do not contact with eyes, skin and on clothing. Do not inhale. Handle with care. Wash mouth and hand after handling the material.
<b>Storage</b>	Keep container tightly closed. Avoid such conditions as direct sunlight and high piling. Store in low-humid, low-temperature area.

### Section 8 – Exposure Controls, Personal Protection

<b>Engineering Controls</b>	Facilities storing or utilizing the material should be equipped with an eye wash facilities and a safety shower. Use adequate ventilation to keep airborne concentrations low.
<b>Exposure Limits</b>	No data found
<b>Personal Protective Equipment</b>	
<b>Eyes</b>	Safety goggles
<b>Skin</b>	Rubber gloves
<b>Clothing</b>	Protective clothing and rubber boots
<b>Respirators</b>	Anti-dust mask

### Section 9 – Physical and Chemical Properties

<b>Physical State</b>	Crystal
<b>Appearance</b>	White
<b>Odor</b>	Odorless
<b>Boiling Point</b>	652°C
<b>Melting Point</b>	246.8°C
<b>Density</b>	3.95 (specific gravity)
<b>Flash Point</b>	No data found
<b>Autoignition</b>	No data found
<b>Explosibility</b>	No data found
<b>Vapor Pressure</b>	No data found
<b>Vapor Density</b>	No data found
<b>Solubility</b>	Soluble in water. When dissolving with water, it is hydrolyzed, formed basic salt and the solution becomes turbid. Soluble in water containing hydrochloric acid and alcohol.
<b>Molecular Weight</b>	189.59

### Section 10 – Stability and Reactivity

<b>Stability</b>	Deliquescent (Produce hydrogen chloride gas when burned)
<b>Conditions to avoid</b>	Direct sunlight, high temperature, high humidity and high piling
<b>Incompatibilities with Other Material</b>	Reacts violently with calcium carbide, ethylene oxide, hydrazine hydrate, nitrate and so on.
<b>Hazardous Decomposition Product</b>	Hydrogen chloride gas and tin/ tin oxides when burned.

<b>Hazardous Polymerization</b>	Will not occur
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### Section 11 – Toxicological information

<b>RTECS #</b>	No data found
<b>LD50/ LC50</b>	oral-rat LD50: 700 mg/kg oral-mouse LD50: 250 mg/kg
<b>Carcinogenicity</b>	No data found
<b>Mutagenicity</b>	Sister Chromatid Exchange Hamster (Ovary): 25 mg/L DNA damage Intratesticular rat TDL <sub>0</sub> : 15,167 µg/kg
<b>Reproductive Effects</b>	No data found
<b>Teratogenicity</b>	No data found
<b>Immunology</b>	No data found
<b>Irritation</b>	May cause irritation to skin and mucous membrane

### Section 12 – Ecological Information

<b>Ecotoxicity</b>	No data found
<b>Environmental Standard</b>	No data found

### Section 13 – Disposal Consideration

<b>Disposal Method</b>	Federal (national), state or local laws and regulations will determine the proper waste disposal method.
<b>Regulation Method</b>	Federal (national), state or local laws and regulations

### Section 14 – Transport Information

<b>Shipping Name</b>	CORROSIVE SOLID, N.O.S CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S
<b>Hazard Class</b>	8
<b>UN #</b>	1759 3260
<b>Packing Group</b>	III

### Section 15 – Regulatory Information

<b>United States</b>	<b>TSCA</b>	On the list
<b>EC</b>	<b>EINECS</b>	231-868-0
	<b>R Phrases</b>	R22 Harmful if swallowed R34 Causes burns
	<b>S Phrases</b>	No data found
<b>Canada</b>	<b>WHMIS</b>	No data found
<b>Japan</b>	<b>PRTR law</b>	Not on the list

**Section 16 – Other Information**

<b>MSDS Creation Date</b>	April 09, 2010
<b>Revised Date</b>	April 23, 2013
<b>Revised No.</b>	Revised 4th

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