GHS Safety Data Sheet

SDS No. : SNH02LAEG

Date Issued: 2013/08/01

Section 1. Identification of the substance or mixture and of the supplier

1.1 Product Information

Product name: SnCl₄ Tin(IV) chloride, anhydrous

Product number:	Purity	Form	Size (mm) or Shape
SNH07LB	99.999 %(5N)	liquid	

1.2 Company Information:

Manufacturer :	Kojundo Chemical Laboratory Co., Ltd			
	1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284			
	Phone: +81-49-284-1511 Fax: +81-49-284-1351			
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Emergency Phone : +81-49-284-1511

Section 2. Hazards identification

GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Acute toxicity(inhalation : vapor) : Category 1 Skin corrosive/irritation : Category 1A-1B Serious eye damage/eye irritation : Category 1 Specific target organ toxicity, single exposure : Category 3 Specific target organ toxicity, repeated exposure : Category 1	Not classified	Corrosive to metals : Category 1 Flammable liquids : Not classified Pyrophoric liquids : Not classified Self-heating substances and mixtures : Not classified Substances and mixtures which, in contact with water, emit flammable gases : Not classified

GHS Label: TRC

Pictograms or symbols



Warning word: Not applicable			
Hazard information	Description of precaution		
May be corrosive to metals Fatal if inhaled Causes severe skin burns and eye damage Causes serious eye damage May cause respiratory irritation Causes damage to organs(Lung) through prolonged or repeated exposure	 Wear protective gloves/protective clothing/eye protection/respiratory protection /face protection during handling. Avoid breathing mist/fume/vapors. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling. Take off the contaminated clothing and wash it before reuse. Use only outdoors or in well-ventilated area. Keep only in original container. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Take off immediately all contaminated clothing and rinse skin with water/shower. Then wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell. Absorb spillage to prevent material damage. Protect from sunlight. Store in a cool, dry and well-ventilated place. Keep container tightly closed. Store in corrosive resistant container with a resistant inner liner. Store locked up. Dispose of contents/ container in accordance with local/national regulations. 		

Additional hazard information:

Heating may liberate toxic gases/fume. With respect to additional hazard information, see Section 11.

Section 3. Composition / information on ingredients

Chemical or common name:	Tin(IV)chloride
Synonyms:	Stannic chloride
Chemical formula:	SnCl ₄
Single Substance or Compound:	Single substance
Composition:	100%
CAS#:	7646-78-8
RTECS#:	XP8750000
TSCA inventory:	listed
EINECS:	2315889

Section 4. First aid measures

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to		
	rinse for at least 15 minutes and get medical attention.		
Skin contact:	Remove immediately all contaminated clothing. Wipe off the product immediately		
	by tissue or soft cloth, etc. Promptly flush contaminated skin with soap or mild		
	detergent and water. Contact physician if irritation continues.		
Inhalation:	Remove the exposed person immediately and provide fresh air.		
	Get medical attention.		
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.		

Section 5. Fire fighting measures

Extinguishing media:

	Carbon dioxide, Dry chemical powder, water fog or foam.	
Fire fighting:	Self-contained breathing apparatus and full protective clothing should be used, if the	
	material is involved in fire.	
	Remove containers to safe place if possible.	
Explosion hazards: No data available		
Specific hazards arising from the chemical:		
In case of fire, may liberate toxic gases/ fume.		
Reaction with water may generate much heat that will increase the concentration of		
fumes in the air.		

Section 6. Accidental release measures

Personal Precautions: Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor. Environmental hazard precautions: Shut off leak if without risk. Prevent flow out to river, etc. so as not to badly affect. Method for containment and cleaning up: Avoid unnecessary contacts with spills. Indoor leakage: Ventilate as much as possible until the cleaning is completed. Outdoor leakage: Work from the windward and evacuate the leeward crowd. Gather up, pack in closed container as much as possible. Carefully collect remnant and move to a safe place.

Section 7. Handling and storage

Precautions to be taken in handling:

Safe handling: Handling worker wears suitable protective clothing, and use local ventilation equipment.

Precautions to be taken in storage:

General precautions:

Keep only in original container.

Keep container or bottle tightly closed.

Store in a cool, dry place away from incompatible materials.

Section 8. Exposure controls / personal protection

Exposure guideline:	ACGIH (2012): Tin, Oxide and inorganic compounds, except tin hydride TLV-TWA = 2 mg/m ³ (as Sn)
	OSHA (2006): Tin, inorganic compounds $PEL-TWA = 2 \text{ mg/m}^3$ (as Sn)
Facility measures:	Local ventilation of closed work room or total proper ventilation to prevent
	inhalation.
Protective ware:	Wear appropriate NIOSH/MSHA-approved respirator, safety goggles,
	face shields, protective gloves.

Section 9. Physical and chemical properties

Color and Form:	Colorless fuming liquid with pungent odor.
Chemical formula:	${ m SnCl}_4$
Formula weight:	260.5
Melting point:	-33 °C
Boiling point:	114.1 °C
Density:	2.26 g/cm^{3}
Water solubility	Reacts violently with water, and produces corrosive hydrogen chloride.
Flammable:	non-flammable substance
Oxidation:	No data available

Section 10. Stability and reactivity

Stability:	Stable in closed container.
Reactvity	
Incompatibility:	Strong bases, alcohols, tury

ity: Strong bases, alcohols, turpentine, amine.

Condition to avoid: Water and moisture, light, heat.

Hazardous decomposition products.:

Hydrogen chloride, tin oxides.

Section 11. Toxicological information

Acute toxicity(Oral, dermal):	GHS : No data available
Acute toxicity(Inhalation : vapor) :	GHS : Category 1 ; Fatal if inhaled.
	Inhalation rat $LD_{50}(4hr) = 0.47 \text{ mg/L} (RTECS(2004))$
Skin corrosive / irritation:	GHS: Category 1A-1B;
	Causes severe skin burns and eye damage.
Serious eyes damage / eye irritation:	GHS: Category 1; Causes serious eye damage.
Respiratory sensitization:	GHS : No data available
Skin sensitization:	GHS : No data available

Germ cell mutagenicity:	GHS : No data available
Carcinogenicity:	GHS : No data available
	IARC(2013), NTP(2011), ACGIH(2012) : not listed.
Reproductive toxicity:	GHS : No data available
Specific target organ toxicity	
-single exposure:	GHS : Category 3 ; May cause respiratory irritation.
Specific target organ toxicity	
-repeated exposure:	GHS: Category 1;
	Causes damage to organ (Lung) through prolonged or repeated exposure.
Aspiration hazard:	GHS : No data available

Section 12. Ecological information

Ecotoxicity:

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Hazards to the aquatic environment		
-acute toxicity:	GHS : Not classified.; Falls below the lowest level	
	$ m Fish(Zebrafish) \ \ LC_{50}(96hr) > 1000 mg/L \ (IUCLID(2000))$	
-chronic toxicity:	GHS : Not classified.; Falls below the lowest level	
	Since not water-insoluble (soluble in water : HSDB(2004)) and acute toxicity is low.	
Hazrdous the ozone layer:	GHS : No data available	
	No Freon or Halon	
Fish toxicity:	See for "Hazards to the aquatic environment-acute toxicity"	
Degradability:	No data available	
Bioaccumulative potential:	No data available	
(ref.) Sn Biologie	eal half-life 35 day,	
Rate of	absorption Oral=0.05 Respiratory tract=0.28	
Mobility in soil:	No data available	

Section 13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.

Section 14. Transport information

UN number:	1827
IATA shipping name:	Stannic chloride, anhydrous
IATA classification:	Hazardous Class 8 (Corrosive substances)
IATA packing group:	П
HS code:	2827.39
Marine pollution:	None

Section 15. Regulatory information

 $\label{eq:tscalar} \text{TSCA inventory}: \quad \text{listed}.$

 $Please \ refer \ to \ any \ other \ local \ / \ national \ measures \ that \ may \ be \ relevant.$

Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.