

**MATERIAL SAFETY DATA SHEET**

Product Name: Tin metal granulated

CAS No.:7440-31-5

Version: 0

**1. Identification**

**Product Code** : 90577  
**Company Name** : Advent Chembio Private Limited  
**Address** : W-288, MIDC, TTC INDUSTRIAL AREA, THANE-BELAPUR ROAD, RABALE, NAVI MUMBAI - 400 701.  
**E-mail** : [info@adventchembio.com](mailto:info@adventchembio.com)  
**WEBSITE** : [www.adventchembio.com](http://www.adventchembio.com)  
**Company Phone Number** : 022-27690837

**2. Composition/Information on Ingredients**

Ingredient	CAS No	Percent
TIN METAL GRANULATED	7440-31-5	100 %

**3. Hazards Identification****Hazard classification****Labels elements**

**Hazard symbol** : No symbol  
**Signal word** : Warning  
**Hazard statement** : May form combustible dust concentrations in air.  
**Precautionary statement** : Not Applicable.  
**Other hazards which do not result in GHS classification** : None.

**4. First Aid Measures**

**General information** : Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.

**Ingestion** : Rinse mouth thoroughly. Get medical attention if symptoms occur.

**Inhalation** : Move to fresh air. Get medical attention if symptoms occur.

**Skin contact** : Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse.

**Eye contact** : Flush thoroughly with water. If irritation occurs, get medical assistance.

**MATERIAL SAFETY DATA SHEET****Product Name:** Tin metal granulated**CAS No.:**7440-31-5**Version:** 0

**Most important symptoms/effects, acute and delayed** : May cause irritation to skin, eyes, and respiratory tract.

**Indication of immediate medical attention and special treatment needed** : Treat symptomatically.

**5. Fire fighting measures**

**General fire hazards** : Powdered material may form explosive dust-air mixtures.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media** : Dry sand, graphite powder, dry sodium chloride based extinguishers

**Unsuitable extinguishing media** : Water.

**Specific hazards arising from the chemical** : During fire, gases hazardous to health may be formed. Dust clouds may be explosive under certain conditions. Contact with strong oxidizers may cause fire .

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures** : Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

**Special protective equipment for fire-fighters** : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures** : ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Use personal protective equipment.

**Methods and material for containment and cleaning up** : Avoid dust formation. Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.

**Notification Procedures** : Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

**Environmental precautions** : Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

# MATERIAL SAFETY DATA SHEET

**Product Name:** Tin metal granulated

**CAS No.:**7440-31-5

**Version:** 0

## 7. Handling and Storage

- Precautions for safe handling** : Avoid generation and spreading of dust. Ground/bond container and receiving equipment. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Wash thoroughly after handling.
- Conditions for safe storage, including any incompatibilities** : Keep containers tightly closed. Store in cool, dry place. Store in a well-ventilated place.

## 8. Exposure Controls Personal Protection

### Control parameters

#### Occupational exposure limits

Chemical identity	Type	Exposure Limit values	Source
TIN	TWA	2 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2011)
TIN - as Sn	REL	2 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	2 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	2 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

**Appropriate engineering controls** : No data available.

### Individual protection measures, such as personal protective equipment

**General information** : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Eye/face protection** : Use tight fitting goggles if dust is generated.

**Hand protection** : Wear protective gloves.

**Other** : Wear suitable protective clothing.

**Respiratory protection** : In case of inadequate ventilation use suitable respirator.

**Hygiene measures** : Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.

**MATERIAL SAFETY DATA SHEET****Product Name:** Tin metal granulated**CAS No.:**7440-31-5**Version:** 0**9. Physical and Chemical Properties**

<b>Appearance</b>	:	Silver Granules Solid .
<b>Odor</b>	:	Odorless
<b>pH</b>	:	No data available.
<b>Melting point/freezing point</b>	:	231.9 °C
<b>Initial boiling point and boiling range</b>	:	2,507 °C
<b>Flash Point</b>	:	Not applicable
<b>Vapor pressure</b>	:	0.13 kPa (1,609 °C)
<b>Vapor density</b>	:	No data available
<b>Relative density</b>	:	7.31
<b>Solubility in water</b>	:	Insoluble in water
<b>Solubility (other)</b>	:	No data available.
<b>Formula</b>	:	Sn
<b>Molecular Weight</b>	:	118.69 g/mol

**10. Stability and Reactivity**

<b>Reactivity</b>	:	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	:	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	:	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	:	Contact with incompatible materials. Heat, sparks, flames. Avoid dust formation .
<b>Incompatible materials</b>	:	Acids. Halogens and halogenated compounds. Peroxides. Sulfur oxides .
<b>Hazardous decomposition products</b>	:	None known.

**11. Toxicological Information****Information on likely routes of exposure**

<b>Ingestion</b>	:	May cause irritation of the gastrointestinal tract.
<b>Inhalation</b>	:	May cause irritation to the respiratory system.
<b>Skin contact</b>	:	May cause irritation.
<b>Eye contact</b>	:	May cause temporary eye irritation

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

<b>Oral Product</b>	:	No data available.
<b>Dermal Product</b>	:	No data available
<b>Inhalation Product</b>	:	No data available

**MATERIAL SAFETY DATA SHEET****Product Name:** Tin metal granulated**CAS No.:**7440-31-5**Version:** 0

<b>Repeated dose toxicity Product</b>	:	No data available.
<b>Skin corrosion/irritation Product</b>	:	May cause skin irritation.
<b>Serious eye damage/eye irritation Product</b>	:	May irritate eyes.
<b>Respiratory or skin sensitization Product</b>	:	Not a skin sensitizer.
<b>Carcinogenicity Product</b>	:	This substance has no evidence of carcinogenic properties.
<b>IARC Monographs on the Evaluation of Carcinogenic Risks to Humans DIOXANE</b>	:	No carcinogenic components identified.
<b>US. National Toxicology Program (NTP) Report on Carcinogens DIOXANE</b>	:	No carcinogenic components identified.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	:	No carcinogenic components identified.
<b>Germ cell mutagenicity In vitro Product</b>	:	No mutagenic components identified.
<b>In vivo Product</b>	:	No mutagenic components identified.
<b>Reproductive toxicity Product</b>	:	No components toxic to reproduction.
<b>Specific target organ toxicity - single exposure Product</b>	:	No data available.
<b>Specific target organ toxicity - repeated exposure Product</b>	:	No data available.
<b>Aspiration hazard Product</b>	:	Not classified.
<b>Other effects</b>	:	None known.

**12. Ecological Information****Ecotoxicity****Acute hazards to the aquatic environment :**

<b>Fish Product</b>	:	No data available.
<b>Specified substance(s): TIN</b>	:	LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 28 d): > 0.17 - < 15.61 mg/l Mortality

<b>Aquatic invertebrates Product</b>	:	No data available
--------------------------------------	---	-------------------

**Chronic hazards to the aquatic environment :**

<b>Fish Product</b>	:	No data available.
<b>Aquatic invertebrates Product</b>	:	No data available.
<b>Toxicity to Aquatic Plants Product:</b>	:	No data available.
<b>Persistence and degradability</b>	:	
<b>Biodegradation Product</b>	:	The product is not readily biodegradable.
<b>BOD/COD ratio Product</b>	:	No data available.
<b>Bioaccumulative potential</b>	:	
<b>Bioconcentration factor (BCF) Product</b>	:	No data available on bioaccumulation.
<b>Partition coefficient n-octanol /</b>	:	No data available.

**MATERIAL SAFETY DATA SHEET****Product Name:** Tin metal granulated**CAS No.:**7440-31-5**Version:** 0**water (log Kow) Product****Mobility in soil****Other adverse effects**

- : The product is water soluble and may spread in water systems.
- : The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**13. Disposal consideration****Disposal instructions**

- : Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated packaging**

- : Since emptied containers retain product residue, follow label warnings even after container is emptied.

**14. Transport Information**

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
<b>DOT</b>			Not regulated.		
<b>IMDG</b>			Not regulated.		
<b>IATA</b>			Not regulated.		

**15. Regulatory Information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

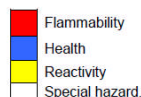
Safety, health and environmental regulations/legislation specific for the substance or mixture  
No Data Available.

**MATERIAL SAFETY DATA SHEET**

Product Name: Tin metal granulated

CAS No.:7440-31-5

Version: 0

**16. Other Information****NFPA Hazard ID**

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date :01/08/2014

Version : 0

***Disclaimer: This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. ADVENT CHEMBIO PRIVATE LIMITED makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the technical instructor in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of ADVENT CHEMBIO PRIVATE LIMITED and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).***