



# Safety Data Sheet

## TIN-BASED BABBITT

### SECTION 1: PRODUCT DESCRIPTION

#### PRODUCT IDENTIFIER

Product form: Solid metal  
Product Name: Tin Babbitt Alloy  
Formula: Sn/Sb/Cu  
Synonyms: N/A

#### SUPPLIER

**NATHAN TROTTER & COMPANY**  
**241 W. STEWART HUSTON DRIVE**  
**COATESVILLE, PA 19320**  
**PH. 610-524-1440**  
**FX. 610-524-2496**

#### INTENDED USE OF PRODUCT

Use: Industrial; professional use only

#### EMERGENCY TELEPHONE NUMBER

CHEMTEL 24 HR Emergency number: 1-800-255-3924

### SECTION 2: HAZARD IDENTIFICATION

**GHS CLASSIFICATION:** Acute toxicity, Oral (Category 4)  
Acute toxicity, Inhalation (Category 4),  
Acute aquatic toxicity (Category 2),  
Chronic aquatic toxicity (Category 2),



# WARNING

**Hazard statements:** H301: Harmful if swallowed.  
H333: Harmful if inhaled.  
H371: Toxic to aquatic life with long lasting effects

**Precautionary Statements:** P261: Avoid breathing dust/fumes/gas/mist/vapors/spray  
P264: Wash hands thoroughly after handling  
P270: Do not eat, drink or smoke when using product  
P273: Avoid release in to the environment  
P301 + 312 + 330: IF SWALLOWED, call a POISON CONTROL CENTER/DOCTOR if you feel unwell. Rinse mouth.  
P304 + 312 + 340: IF INHALED, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CONTROL CENTER/DOCTOR if you feel unwell.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE			
Name	Product Identifier	%	Classification (GHS-US)
Tin, Metal	7440-31-5	80-100%	Not classified as hazardous
Antimony, Metal	7440-36-0	0-10%	See section 2
Copper Metal	7440-50-8	0-10%	Not classified as hazardous

## SECTION 4: FIRST AID MEASURES

**General First-aid Measures:** Never give an unconscious person anything by mouth. If you feel unwell, seek medical attention. (show label when possible)

**INHALATION:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.

**EYES:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**SKIN CONTACT:** After contact with skin, wash immediately with plenty of water.

**INGESTION: IF SWALLOWED:** call a POISON CENTER or doctor/physician if you feel unwell

## SECTION 5: FIRE FIGHTING PROCEDURES

**EXTINGUISHING MEDIA:** Use dry chemical, CO2 or appropriate foam, Water spray.

**FIRE FIGHTING METHODS AND PROTECTION:** Use dry chemical or cover with a dry sand or lime. Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

**FIRE AND/OR EXPLOSION HAZARDS:** Fire or excessive heat may produce hazardous decomposition products. Avoid dusting. May become explosive when dispersed in air.

**HAZARDOUS COMBUSTION PRODUCTS:** Antimony and Tin compounds

## SECTION 6: SPILL OR LEAK MEASURES/PROCEDURES

**STEPS TO TAKE IN CASE MATERIAL IS RELEASED OR SPILLED:**

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid creating and inhaling dust. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation collect spillage.

## SECTION 7: HANDLING AND STORAGE

**HANDLING:**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Keep container tightly closed in a cool, well-ventilated place. Keep container dry. Do not breathe gas/fumes/vapor/spray.

**STORAGE:** Store locked up. Keep container tightly closed in a cool, well-ventilated place.

**STORAGE CODE:** Green - general chemical storage.

## SECTION 8: PROTECTION INFORMATION

CHEMICAL NAME:	<u>ACGIH</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>TWA</u>	<u>STEL</u>
TIN	2.0 MG/M3	N/A	2.0 MG/M3	N/A
ANTIMONY	0.05 MG/M3	N/A	50 µg/m3	N/A
COPPER	0.2 MG/M3	N/A	0.1 MG/M3	N/A

**CONTROL PARAMETERS/ ENGINEERING MEASURES:** Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):** Lab coat, apron, eye wash, safety shower.

**RESPIRATORY PROTECTION:** No respiratory protection required under normal conditions of use. Respiratory protection may be required in addition to ventilation depending upon conditions of use.

**EYE PROTECTION:** Wear chemical splash goggles when handling this product. Have an eye wash station available.

**SKIN PROTECTION:** Avoid skin contact by wearing heat resistant gloves, an apron and other protective equipment depending upon conditions of use. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

**GLOVES:** Heat resistant gloves.

## SECTION 9: PHYSICAL DATA

**FORMULA:** Sn/Sb/Cu

**MOLECULAR WEIGHT:** N/A

**APPEARANCE:** Silver Metallic Solid

**ODOR:** None

**PHYSICAL STATE:** Solid

**pH:** No data available

**MELTING POINT:** 450° F (232°C)

**BOILING POINT:** 4717° F (2603°C )

**FREEZING POINT:** No data available

**FLAMMABILITY:** No data Available

**FLASH POINT:** No data available

**AUTO IGNITION TEMPERATURE:** No data available

**DECOMPOSITION TEMPERATURE:** No data available

**VAPOR PRESSURE :** 1.3332 hPa at 1492°C

**SPECIFIC GRAVITY:** 7.28 ( Water = 1)

**RELATIVE VAPOR DENSITY AT 20°C:** No data available

## SECTION 10: REACTIVITY DATA

**REACTIVITY:** No data available

**CHEMICAL STABILITY:** Stable under recommended handling and storage conditions. (see section 7)

**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

**CONDITIONS TO AVOID:** None known

**INCOMPATIBLE MATERIALS:** Strong Acids, strong oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Antimony

## SECTION 11: TOXICITY DATA

**ROUTES OF ENTRY:** Inhalation, ingestion, eye or skin contact.

**SYMPTOMS (ACUTE):** Respiratory disorders, Cardiovascular system, Gastrointestinal.

**DELAYED EFFECTS:** No data available

### ACUTE TOXICITY:

<u>CHEMICAL NAME:</u>	<u>CAS NUMBER</u>	<u>ORAL LD50</u>	<u>DERMAL LD50</u>	<u>INHALATION LC50</u>
Antimony, Metal	7440-36-0	Rat 100mg	N/A	N/A
Tin, Metal	7440-31-5	N/A	N/A	N/A
Copper	7440-50-8	N/A	N/A	N/A

### CARCINOGENICITY:

<u>CHEMICAL NAME:</u>	<u>CAS NUMBER</u>	<u>IARC</u>	<u>NTP</u>	<u>OSHA</u>
Antimony, Metal	7440-36-0	N/A	N/A	N/A
Tin, Metal	7440-31-5	N/A	N/A	N/A
Copper, Metal	7440-50-8	N/A	N/A	N/A

### CHRONIC EFFECTS:

**MUTAGENICITY:** No evidence of a mutagenic effect.

**TERATOGENICITY:** No evidence of a teratogenic effect (Birth defect)

**SENSITIZATION:** No evidence of a sensitization effect.

**REPRODUCTIVE:** Evidence of negative reproductive effects.

### TARGET ORGAN EFFECTS:

**ACUTE:** See section 2

## SECTION 12: ECOLOGICAL DATA

**OVERVIEW:** Moderate ecological hazard. This product may be dangerous to plants and/or wildlife. Harmful to fish and other water organisms.

	<u>CHEMICAL NAME:</u>	<u>CAS NUMBER</u>	<u>ECO TOXICITY</u>
<b>MOBILITY:</b> N/A	ANTIMONY, METAL	7440-36-0	NO DATE AVAILABLE
<b>PERSISTENCE:</b> N/A	TIN.METAL	7440-31-5	N/A
<b>BIOACCUMULATION:</b> N/A	COPPER	7440-50-8	N/A
<b>DEGRADABILITY:</b> N/A			
<b>OTHER ADVERSE EFFECTS:</b> N/A			

## SECTION 13: DISPOSAL INFORMATION

**DISPOSAL METHODS:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance

**WASTE DISPOSAL CODE(S):** Not determined

## SECTION 14: TRANSPORT INFORMATION

**GROUND- DOT PROPER SHIPPING NAME:**

**AIR- IATA PROPER SHIPPING NAME:**

Not regulated for transport by DOT

Not regulated for air transport by IATA

## SECTION 15: REGULATORY INFORMATION

CHEMICAL NAME:	CAS NUMBER	§ 313 NAME	§ 313 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Tin, Metal	7440-31-5	Tin	No	No	No	No
Copper, Metal	7440-50-8	Copper	No	No	No	No
Antimony, Metal	7440-36-0	Antimony	No	500lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of solid metal released is >100 µm): 2270kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal is >100µm)	No	No

**TSCA STATUS:** All components in this product are on the TSCA Inventory.

## SECTION 16: ADDITIONAL INFORMATION

REVISED: MAY 2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Nathan Trotter & Co. Inc. makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

### GLOSSARY:

**ACGIH:** American Conference of Governmental Industrial Hygienists

**CAS:** Chemical Abstract Service Number

**CERCLA:** Comprehensive Environmental Response, Compensation, and Liability Act

**DOT:** U.S. Department of Transportation

**IARC:** International Agency for Research on Cancer

**N/A:** Not Available

**NTP:** National Toxicology Program

**OSHA:** Occupational Safety and Health Administration

**PEL:** Permissible Exposure Limit

**PPM:** Parts per million

**RCRA:** Resource Conservation and Recovery Act

**SARA:** Superfund Amendments and Reauthorization Act

**TLV:** Threshold Limit Value

**TSCA:** Toxic Substances Control Act

**IDLH:** Immediately dangerous to life and health