



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

CHEMTREC 24 HR Emergency number: 1-800-424-9300
INTERNATIONAL CHEMTREC call: 1-703-527-3887

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.
P405: Store locked up
P501: Dispose of contents and container to an approved waste disposal plant

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

CHRONIC: Not listed as a carcinogen by IARC, NTP, OSHA.

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.

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

END OF SDS