



Ney Metals & Alloys

METALS - WHITE METAL ALLOYS - PEWTER

330 BELMONT AVENUE -

BROOKLYN, NY 11207

TEL: (718) 389-4900

FAX: (718) 342-0175

E-Mail: info@neymetals.com

Website: http://www.neymetals.com

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Product Name : TIN / ANTIMONY / COPPER PEWTERALLOY

Product Code : **791NB7**

Product List : Alloy: Jewelry; Pewter, specialty items

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Manufacturing of Promotional Items, Castings; Jewelry, Pewter; Others.

1.3. Details of the supplier of the safety data sheet

Company identification : Ney Metals & Alloys
330 Belmont Avenue
Brooklyn, NY 11207 USA
Phone: +1.718.389.4900
Fax: +1.718.342.0175

EMERGENCY PHONE:

USA: 1 (800) 777-7NEY
Outside USA: +1 (718) 389-4900

This product is sold for Industrial and Commercial use. This SDS has been developed to address safety concerns of those individuals working with bulk quantities of this material, as well as those of potential users of this product in industrial/occupational settings. ALL United States Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards, and Canadian WHMIS [Controlled Products Regulations] and the Global Harmonization Standard required information is included in appropriate sections based on the U.S. ANSI Z400.1-2008 format. This product has been classified in accordance with the hazard criteria of the countries listed above.

2. HAZARDS IDENTIFICATION

General Hazard Statement: Solid metallic products are generally classified as "articles" and do not constitute a hazardous materials in solid form under the definitions of the OSHA Hazard Communication Standard (29 CFR 1910.1200). Any articles manufactured from these solid products would be generally classified as non-hazardous. However, some hazardous elements contained in these products can be emitted under certain processing conditions, such as but not limited to: burning, melting, cutting, sawing, brazing, grinding, machining, milling, and soldering. Products in the solid state present no fire or explosion hazard. Small chips, fines, and dust may readily ignite.

The following classification information is for the hazardous elements which may be released during processing:

WHMIS (Canada) : CLASS

GHS Classification: Acute Aqua tox 1 Chronic aqua tox 1 Acute tox 0

2.1. Hazard Classes (categories)

Hazard statements

- H Codes: H302, H313, H320, H332, H410 (Antimony)
- Harmful if swallowed
- Harmful if inhaled
- May cause eye irritation
- May be harmful in contact with the skin
- Very toxic to aquatic life with long lasting effects

Hazard words

: Warning



Hazardous (Antimony) to the aquatic environment Skin sensitizer

Precautionary Statements

- P273 : Avoid release to the environment.
- P281 : Use personal protective equipment as required.
- P301 +310 : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- P303+353 : IF ON SKIN (or hair): Rinse skin with water/shower.

- P304+340 : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+310+338+351 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P501 : Dispose of contents/container to comply with all regulations and laws.

2.2. Other hazards

- Reactive with : Acids, oxidants. Release of hydrides, hydrogen. Possibility of eye and skin irritation (Particles). Ingestion will nearly always cause acute gastro-intestinal irritation.
- Acute exposure : Possibility of other organs and body systems damages.

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 1
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 1
Fire = 0
Reactivity = 0

HEALTH	1
FIRE	0
REACTIVITY	0

3. COMPOSITION / INFORMATION OF INGREDIENTS

Name	CAS-No.	Percentage (%)	EC-No.	Hazard Statements
Tin	7440-31-5	85 – 95	231-141-8	None
Antimony	7440-36-0	5 – 10	231-146-5	None H302, H313, H320, H332, H410
Copper	7440-50-8	1 - 5	231-159-6	None

4. FIRST AID MEASURES

4.1. Description of first aid measures

- Eye contact : P305+P351+P338-If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Skin contact : P302+P352-IF ON SKIN: Wash with plenty of soap and water. P333+P313-IF skin irritation or rash occurs: Get medical advice/attention. P363-Wash contaminated clothing before reuse.
- Inhalation : P308-IF exposed or concerned: Get medical advice/attention.
- Ingestion : P301+P310-IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.

5. FIRE-FIGHTING MEASURES

5.1. Fire-fighting measures

- Flash point : Not available.
- Flammable limits : Not available.
- Auto-ignition temperature : Not available.
- Products of combustion : Metal oxides
- Fire hazard : Solid form: No fire hazard. Avoid melting moist metal. Dust: Flammable when exposed to heat or flames. Heated and oncontact with acids or acid fumes, metals can release hydrogen and form Stibine, (Extremely toxic gas).
Tin: Fine dust combustible when exposed to heat.
Antimony: Spontaneously flammable in fluorine, chlorine or bromine. With iodine: Reaction produces heat, which may cause flames or explosion if quantities are great enough. Dust or vapors exposed to heat or flame: Moderate fire or explosion hazard.
- Explosion hazard : Not explosive (Mechanical impact; Static discharge). NEVER spray water on burning metal because of the risk of explosion which would splatter flaming particles of metal to great distances.
Dust: Slightly explosive to explosive in presence of open flames and sparks.
- Extinguishing media : NON-FLAMMABLE. Use firefighting materials and procedures adapted to the immediate environment.
- Protective equipment : Fire-fighters must wear full protective clothing and self-contained breathing apparatus (SCBA).

**DO NOT USE WATER ON MOLTEN METAL:
LARGE FIRES MAY BE FLOODED WITH WATER FROM A DISTANCE**

6. ACCIDENTAL RELEASE MEASURES

- Measures : P391-Collect spillage.
- Methods : Use appropriate tools to place spilled materials in suitable containers for reclamation or disposal.
- Protective equipment : High concentration of fumes or dust or risk of emission of toxic material (Stibine): Use a positive-pressure, self-contained breathing apparatus (SCBA) to avoid inhalation of material. Low concentrations : Use a NIOSH/OSHA approved full face cartridge respirator or the equivalent. Full protective clothing. Work gloves and boots.

7. HANDLING AND STORAGE

NEVER DROP WATER OR LIQUIDS INTO MOLTEN METAL.

***Do not plunge damp or wet ingots/bars/pieces into molten metal.**

Wet or moist ingot(s) WILL present an explosion hazard when submerged in molten metal.

AVOID FIRE/EXPLOSION RISKS. Always preheat ingot before charging into furnace.

- Handling : DO NOT ingest or inhale dust. Wear adequate protective clothing. Wear approved respirators if adequate ventilation cannot be provided. Ingestion or inhalation: Seek medical advice immediately and provide medical personnel with a copy of this SDS.
- : Heated and on contact with acids or acid fumes, metals (Aluminum, zinc, iron, etc.) can release hydrogen: Nascent hydrogen may form: Antimony hydride (Stibine) (Extremely toxic gas). If hydrides suspected in the area, the workplace must be immediately evacuated. Personnel entering this area MUST wear positive-pressure, self-contained breathing apparatus (SCBA).
- Conditions for storage : P405-Store locked up. Container tightly closed. Well ventilated area. Away from: Moisture, incompatible substances (Acids).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Name	CAS-No.	Percentage (%)	TVL-TWA (mg/m ³)	PEL-TWA (mg/m ³)	TWAEV (mg/m ³)
Tin	7440-31-5	85 – 95	2 (Sn)	2 (metal, compounds)	2 (metal)
Antimony	7440-36-0	5 – 10	0.5 (Sb, compds Sb)	0.5 (Sb, compds Sb)	0.5 (Sb, compds Sb)
Copper	7440-50-8	1 – 5	1 (dust, mist, Cu) 0.2 (fumes)	1 (dust, mist, Cu) 0.1 (fumes)	1 (dust, mist, Cu) 0.2 (fumes Cu)

NOTE: Tin: ACGIH TLV TWA: Metal, oxide, inorganic compounds (Sn) except SnH. OSHA PEL-TWA: Metal, inorganic compounds (Sn) except oxides, NIOSH REL-TWA (≤ 10 hours): 2 mg/m³ (except oxides); IDLH: 100 mg/m³.
Antimony: ACGIH TLV-TWA: Elemental and compounds. NIOSH REL-TWA (≤ 10 hours): 0.5 mg/m³; IDLH: 50 mg/m³.
Copper: NIOSH REL-TWA (≤ 10 hours): 1 mg/m³ (Copper, copper compounds, as Cu, except fumes); IDLH : 100 mg/m³ (metal; dust, mists, fumes, compounds Cu).

Consult local authorities for acceptable exposure limits

- Engineering Controls : Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.
 - Individual protection and boots. Dust respirator. : During melting, casting, etc., Safety goggles. Coveralls. Work gloves
- Be sure to use a NIOSH approved respirator or equivalent when concentrations exceed occupational exposure limits and working with molten metals.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Solid (Ingot, bar).
Color	: Silver Grey to yellowish.
Odor	: Odorless, or metallic odor
Taste	: Not applicable.
Molecular weight	: Not applicable.
pH (1% soln/water)	: Not applicable.
Boiling point [°C]	: 2200°F
Melting Point [°C]	: Weighted average: 266.62°C (511.9°F)
Critical temperature	: Not available.
Specific gravity	: Weighted average: 7.38 (Water = 1)
Vapor pressure	: Not available.
Vapor density	: Not available.

Solubility	:	No (Water).
Volatility	:	Not available.
% moisture	:	Not available.
Odour threshold	:	Not available.
Water/oil dist. Coeff.	:	Not available.
Ionicity (in water)	:	Not available.
Dispersion	:	No (Water).

10. STABILITY AND REACTIVITY

10.1. Stability	:	Yes (under normal temperature conditions of ambient temperature).
10.2. Reactivity	:	Reactive or incompatible with: Acids.
10.3. Hazardous decomposition products	:	Metal oxides. Heated and on contact with acids or acid fumes, metals (soft or galvanized metal, aluminium) can release hydrogen and form antimony hydride (Stibine) (Extremely toxic gas).
10.4. Conditions to avoid	:	Acids.
10.5. Dangerous polymerization	:	No.
10.6. Materials to avoid	:	Tin: Reacts violently under certain conditions with: Chlorine, bromine, trifluoride (Chlorine, bromine), acids, oxidants. Can react with some extinguishing agents (Bicarbonate powder, carbon dioxide). Antimony : Possibility of violent reaction with : Ammonium nitrate, bromate trifluoride, halogens, chloric acid, chlorine trifluoride, nitric acid, potassium nitrate, potassium permanganate, dipotassium peroxide, sodium nitrate and oxidants. Copper: Violent reaction with: Bromates, chlorates, hydrogen peroxide, sulphuric acid, sodium peroxide, dipotassium peroxide, hydrazoic acid, combination of hydrogen sulphur and air.
		<i>NOTE: This list of products is not exhaustive. Verify technical documents to determine any incompatibilities with your process.</i>
10.7. Corrosivity	:	No.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

- Route of entry	:	Ingestion. Inhalation - Yes. Eyes and skin contact -No.
- Carcinogenicity	:	Antimony: NOT LISTED (IARC, ACGIH).
- Mutagenicity	:	Acute toxicity: Tin: UNREPORTED ROUTE acute (LoTD): 250 mg/kg (Human). (RTECS). <i>Antimony: ORAL acute (LD50): 7 000 mg/kg (Rat). INTRAPERITONEAL acute (LD50): 100 mg/kg (Rat); 80 mg/kg (Mouse). (RTECS).</i>
- Acute effects	:	Solid form: No health hazards. Conditions and work practices which generate dust or fumes should be avoided or controlled. Other forms: Dangerous (ingestion, inhalation).
- Chronic effects	:	Non-controlled repeated or prolonged exposure: Tin: Low toxicity for humans. Chronic inhalation of oxide (Dust, fume) may cause stannosis (Benign pneumoconiosis) without any pulmonary functional impairment. Other sensitive organs: Kidneys, central nervous system. Antimony: The principal toxicological properties mimic those of arsenic such as: abdominal cramps, nausea, vomiting, watery diarrhea which may be bloody. Possibility of dermatitis called antimony spots: Papules and pustules around sweat and sebaceous glands (Generally on the forearms) which resemble chicken pox and are transient in nature. Some people may develop an allergy to antimony metal. Inhalation (Antimony and compounds): Possibility of pneumoconiosis which can lead to some obstructive lung disease. There is some evidence that antimony may have some effect on the heart.
- Toxicity	:	Persons with the following pre-existing conditions warrant particular attention: - Tin : Respiratory system (Inorganic compounds). Antimony : Pulmonary and cardiac conditions. <i>Eating, drinking and smoking must be prohibited in areas where this material is handled and processed. Wash hands and face before eating, drinking and smoking.</i>

12. ECOLOGICAL INFORMATION

- 12.1. Toxicity
 - Ecotoxicity : Heavy metals : Harmful to aquatic life. (Antimony)
 - Toxicity to animals : Tin : UNREPORTED ROUTE acute (LoTD) : 250 mg/kg (Human). (RTECS).
- 12.2. Mobility in soil : Not applicable
- 12.3. Persistence and degradability : Not applicable.
- 12.4. Bioaccumulation : Not Applicable
- 12.5. Biodegradation products : Not biodegradable.
- Biodegradation products (Toxicity) : Not applicable.
- 12.6. Other adverse effects
- Remarks on environment : Due to the product's composition, particular attention must be taken : Run-off water may become acidic and may be harmful to flora and fauna.
- BOD5 and COD : Not available.

13. DISPOSAL CONSIDERATIONS

- 13.1. Disposal methods : Recycle to process, if possible. P501-Dispose of contents/container in full compliance with Federal, Provincial and local regulations.

14. TRANSPORT INFORMATION

DOT Classification: Non-Hazardous

Marine Pollutant: NE

In accordance with DOT / ADR / RID / ADN / IMDG / ICAO / IATA

DOT (DEPARTMENT OF TRANSPORTATION)	PROPER SHIPPING NAME: Not Regulated / Not Dangerous Goods
ROAD AND RAIL (ADR/RID)	PROPER SHIPPING NAME: Not Regulated / Not Dangerous Goods
AIR (ICAO/IATA)	SHIPPING NAME: Not Regulated / Not Dangerous Goods
VESSEL (IMO/IMDG)	SHIPPING NAME: Not Regulated / Not Dangerous Goods
CANADA TRANSPORT OF DANGEROUS GOODS	SHIPPING NAME: Not Regulated
MARINE POLLUTANT	No

UN Number: Not Applicable

UN Proper Shipping Name: Not Applicable

- TDG (Pictograms) : Not regulated (Canada).
- PIN : Not applicable.
- Special provisions (Transport) : Not applicable.

15. REGULATORY INFORMATION

- U.S. - Pennsylvania - RTK (Right to Know) List
- U.S. - Massachusetts - Right To Know List
- U.S. - Minnesota - Hazardous Substance List
- U.S. - New Jersey - Right to Know Hazardous Substance List

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

- FIRE: No
- PRESSURE GENERATING: No
- REACTIVITY: No
- ACUTE: No
- CHRONIC: No

GENERAL COMMENTS: All components of this product are included in inventory, exempt, or notified: USA TSCA Philippines PICCS, Korean KECL, European EINECS, Canadian DSL

- Labelling (GHS) : Regulation (EC) No. 1272/2008 CLP : Listed. **Not Listed**

- Labelling (DSD) : EU (Regulation 67/548/EEC) : Listed.



EU: Consolidated Inventories: Listed
 Tin : EU Consolidated Inventories : EC Number 231-141-8.
 Antimony: EU Consolidated Inventories : EC Number 231-146-5.
 Not classified in the Annex I of Directive 67/548/EEC.
 Not listed in the Annex I of Council Regulation No (EC) 304/2003.
 Not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93.

Risk phrases (DSD)

R43-May cause sensitization by skin contact.
R50/53-Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases (DSD)

S22-Do not breathe dusts.
S36-Wear suitable protective clothing.
S45-In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61-Avoid release to the environment. Refer to special instructions/Safety data sheets.

CEPA DSL (CANADA)

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) : on the Domestic Substances List (DSL) ; acceptable for use under the provisions of CEPA.

Listed on the United States TSCA (Toxic Substances Control Act) inventory Regulation (U.S.A.)

CERCLA Section 103 Hazardous substances (40 CFR 302.4) ; SARA 110 ATSDR CERCLA Priority List : Listed ; SARA Section 313, Toxic Chemicals (40 CFR 372.65) : Listed.
Antimony (RQ) : *5 000 pounds (2 270 kg).

TSCA (EPA, Toxic Substance Control Act) Chemical Inventory (40 CFR710) : Listed.
Tin ; Antimony
* No declaration required if the diameter piece of solid metal released is equal to or exceeds 100 micrometers (0.004 inches).

Classifications HCS (U.S.A.)

NFPA (National Fire Protection Association) (U.S.A.)

(Health, Flammability, Reactivity): 1-0-0

16. OTHER INFORMATION

MANUFACTURER DISCLAIMER:

Ney believes that the information contained in this Safety Data Sheet (SDS) is accurate as of the "Date of Last Revision" specified on this SDS. As the condition or methods of use are beyond Ney's control, we do not assume any responsibility and expressly disclaims any liability for any use of this material. The information relates only to typical properties of this Ney product. Do not use the information for product performance or specification purposes. The information is for use by technically skilled persons at their own risk whom must determine the conditions of safe use of the products.

NEY METALS & ALLOYS MAKES NO EXPRESSED OR IMPLIED WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE PRODUCT OR THE INFORMATION WITHIN.

This information may not be valid for product use in combination with any other product or material or in any process. Ney expressly disclaims any liability arising from any use of the product or any reliance on the information. Do not treat the information (a) as assurance that use of the product will not infringe patent or other rights or (b) as a license or grant of patent or other property rights.

"Ney Metals & Alloys is a DBA of Belmont Metals Inc."

SPECIFY NEY "ENVIRONMENTALLY CORRECT" LEAD FREE ALLOYS, METALS & PRODUCTS

SPECIFY NEY "ENVIRONMENTALLY CORRECT" LEAD FREE ALLOYS, METALS & PRODUCTS

Aluminum Solder	Cadmium Free Alloys	Indium	Lead Free Eutectics	Solder
Antimony	Cadmium	Jewelers Model Sheets	Low Temperature Alloys	Special Alloys
Babbitt	Centrifugal (Spin Cast) Alloys	Jewelers Model Wire	Paste Solders	Tin
Base Metals	Fluxless Aluminum Solder	Jewelry Alloys	Pewter	Type Metal
Bismuth	Fusible Alloys	Lead Free Solders	Phosphor Tin	Zinc / Aluminum
Britannia	High Purity Metals	Lead Free Alloys	Powdered Metals	Zinc Die Cast

**ASK FOR US BY NAME ! • NEYLO • NEYLITE • NEY380 •
NEW WHITE METAL ALLOYS AND CUSTOM FORMULAS PRODUCED TO ORDER**