Product/Trade Name: NLA – Tin/Antimony/Copper/Bismuth
NAFTA H.S. DESCRIPTION 8001.20

SECTION 1. IDENTIFICATION

Info furnished by: Hallmark Metals Corporation
Address: 930 Wellington Avenue
Cranston, RI 02910 USA
Emergency Phone: 888 - 467- 8000

SECTION 2. HEALTH HAZARDS DATA

TLV: See Section 3. Primary routes of entry: ingestion of dust, inhalation of dust or fume. Exposure to the massive form of tin presents few hazards in itself. However, normal handling of tin may result in generation of dusts containing the component elements, and inhalation or ingestion of these dusts may present potentially significant health hazards. Thermal cutting and melting of tin may produce fumes containing the components elements, and breathing these fumes may also present potentially significant health hazards. Special precautions should be taken if metal is contaminated: see section ix. Prolonged inhalation of tin fumes or dusts, or ingestion of tin compounds can result in tin poisoning. Symptoms include abdominal pain or colic, constipation, nausea, joint and muscle pains, and muscular weakness. Severe cases of overexposure may lead to central nervous systems disorders, characterized by somnolence, stupor, and ultimately death.

Overexposure to antimony may cause gastrointestinal upset and various nervous complaints, such as sleeplessness, irritability, and muscular pain.

Antimony and arsenic have been identified as potential cancer causing agents. Fumes of copper may cause metal fume fever with flu-like symptoms.

Copper may cause skin and hair discoloration. Silver may cause a grayish pigmentation of the skin, and cause irritation of the skin and mucous membranes.

Bismuth is not considered a toxic or dangerous material, however, it is always good practice to maintain good housekeeping procedures and wash thoroughly.

ELEMENT	CAS	%WT	Carcinogen	TLV/TWA	OSHA PEL ACGIH/ OSHA
*Tin	7440-31-5	96-98	No	2.0 mg/cu m	2.0 mg/cu m
*Antimony	7440-36-0	0-2	No	0.5 mg/cu m	0.5 mg/cu m
*Copper	7440-50-8	0-2	No	0.2 mg/cu m	0.01 mg/cu m (fume)
*Bismuth	7440-69-9	0-2	No	NE	NE

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

*Product contains one or more of these metallic elements in varying percentages by weight.

SECTION 4. FIRST-AID MEASURES

Eye Contact: Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.

Skin Contact: After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Ingestion: Do not induce vomiting. Loosen tight clothing. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

Use special mixtures of dry chemicals. Do not use water or moist sand. Fire fighters should wear self-contained breathing apparatus and protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

No special precautions are necessary for spills of bulk material. If large quantities of dust are spilled, remove by vacuuming with a “Hepa” filter or wet sweeping to prevent heavy concentrations of airborne dust. Clean-up personal should wear respirators and protective clothing.

SECTION 7. HANDLING AND STORAGE

Store material away from incompatible materials, and keep dust away from sources of ignition.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Use general and local exhaust ventilation to keep airborne concentrations of dust or fume below the TLV. Employees should wear OSAH or NIOSH approved respirators for protection against airborne dust or fumes. Full protective clothing should be worn by workers exposed to heavy concentrations of dust, and showering should be required before changing into street clothes. Gloves and barrier creams may be necessary to prevent skin sensitization and dermatitis. Approved safety glasses or goggles should be worn when working with dusty material and molten metal. Safety stations should be provided in close proximity to work areas.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Melting Point	450° F
Boiling Point	4118° F
Vapor Pressure	Not Volatile
Vapor Density (air is 1)	Not Volatile
Solubility in Water	NIL
Appearance & Color	Silver to gray metal
Specific Gravity g/cc	7.2624
Odor	None
% Volatile	Nil
pH	N/A
Evaporation	N/A

SECTION 10. STABILITY AND REACTIVITY

Massive material is stable at ordinary temperatures, but dust presents moderate fire and explosion hazards. Material may be incompatible with acids, bases, and oxidizers. Molten metal may react violently with water. For additional information, users should consult data sheets on individual component elements.

SECTION 11. TOXICOLOGICAL INFORMATION

Inhalation – May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion – May be harmful if swallowed
Skin – May be harmful if absorbed through skin. Causes skin irritation.
Eyes – Causes eye irritation

SECTION 12. ECOLOGICAL INFORMATION

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Metal can be claimed for refuse. Follow Federal, State, and local regulations regarding disposal

SECTION 14. TRANSPORT INFORMATION

No data available

SECTION 15. REGULATORY INFORMATION

Bases on NFPA and NPCA systems
HEALTH – 2
FLAMMABILITY – 0
REACTIVITY – 0
SPECIAL HAZARD –

SECTION 16. OTHER INFORMATION

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