Industrial Surquillo S.A.C.

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Lead (Pb), Tin (Sn) & Antimony (Sb) Alloys
Synonyms	Bullet Casting Alloys (variations of % weight of each alloy may vary based on the expected alloy)
Recommended uses	Bullet casting, ballast weight, Soldering, Casting
Company	Industrial Surquillo S. A. C. Jr. Inca Nº 1001 Surquillo, Lima, PERU Telephone: +511 445 4142 Fax: +511 446 1941 Emergency phone: +511 445 4142

2. HAZARDS IDENTIFICATION

Classification

Hazard class	Acute toxicity, oral and inhalation (Category 4). Harmful if swallowed or inhaled (H302+H332). Do not eat, drink or smoke when using this product (P270). Avoid breathing dust and fumes (P261).
Hazard class	Carcinogenicity (Category 2). Suspected of causing cancer (H351). Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202). Use personal protective equipment as required (P281). Elemental lead is a possible human carcinogen (IARC-2B).
Hazard class	Reproductive toxicity (Category 1A). May damage fertility or the unborn child (H360).
Hazard class	Specific target organ toxicity, repeated exposure (Category 2). May cause damage to organs through prolonged or repeated exposure (H373). Do not eat, drink or smoke when using this product (P270).
Hazard statements	Harmful if swallowed Causes skin irritation Causes serious eye irritation
Precautionary Statements - Prevention	Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements – Response	
Skin	IF ON SKIN, wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention Take off contaminated clothing and wash before reuse
Eyes	IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention
Ingestion	IF SWALLOWED, call a POISON CENTER or doctor/physician if you feel unwell rinse mouth
Precautionary Statements – Disposal	Dispose of contents/container to an approved waste disposal plant Hazards not otherwise classified (HNOC)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Lead	7758-98-7	74-99
Antimony	7440-36-0	0.0-14.0
Tin	7440-31-5	0.0-7.0

4. FIRST AID MEASURES

First aid measures

Eye contact	Molten metal may splash. Seek medical attention immediately
Skin contact	Dermatitis, wash hands before eating, drinking or smoking
Inhalation	Fumes from welding or grinding can in excess cause “Metal Fume Fever”. Remove victim and get aid.
Ingestion	Metallic Taste, abdominal cramps, frequent headaches, foul breath, stomatitis, nephritis.

Most important symptoms/effects

Symptoms	No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically

5. FIRE - FIGHTING MEASURES

Suitable extinguishing media	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Unsuitable extinguishing media	No information available
Flash point	No information available
Method	No information available
Autoignition temperature	No information available

Explosion limits

Upper	No data available
Lower	No data available
Sensitivity to mechanical impact	No information available
Sensitivity to static discharge	No information available

Specific hazards arising from the chemical	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
Hazardous combustion products	Highly toxic fumes Sulfur oxides
Protective equipment and precautions for firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. NFPA

Health	Flammability	Instability	Physical hazards
2	0	1	N/A

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment

Personal precautions	Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.

Environmental Precautions

Environmental precautions	Should not be released into the environment. See Section 12 for additional ecological Information.

Methods and material for Containment and Cleaning up

Methods for containment and clean Up	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling	Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation.

Conditions for safe storage, including any incompatibilities

Storage	Keep containers tightly closed in a dry, cool and well-

ventilated place. Store under an inert atmosphere.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead	0.05 mg/m^3 TWA 0.03 mg/m^3 Action Level	0.05 mg/m^3 TWA 0.03 mg/m^3 Action Level	0.05 mg/m^3 TWA Air concentrations should be maintained so that worker blood lead remains less than 0.06 mg Pb/100 g of whole blood

Legend

ACGIH	*American Conference of Governmental Industrial Hygienists*
NIOSH IDLH	*The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health*

Appropriate engineering controls

Engineering measures	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Powder/Solid
Appearance	Grey
Odor	Odorless
Odor threshold	No information available

Property	Values
pH	Unknown
Melting point/Range	692 °F
Boiling point/Range	Unknown
Flash point	No information available
Evaporation pate	No pertinent
Flammability (solid, gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor pressure	No information available
Vapor density	No information available
Relative density	0.41
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available
Molecular formula	Pb
Specific gravity	9.73

10. STABILITY AND REACTIVITY

Reactive hazard	None known, based on information available
Stability	Stable under normal conditions. Hygroscopic.
Conditions to avoid	Avoid dust formation. Incompatible products. Excess heat. Exposure to moisture.
Incompatible materials	Strong bases, Metals, Alkali metals, Powdered metals
Hazardous decomposition products	Highly toxic fumes, Sulfur oxides
Hazardous polymerization	Hazardous polymerization does not occur
Hazardous reactions	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lead	Lowest published dose 450	Not listed	Not listed
Antimony	Not listed	Not listed	Not listed
Tin	Not listed	Not listed	Not listed

Toxicologically synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes and skin

Sensitization	No information available
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Lead	7758-98-7	2B		A3		
Antimony	7440-36-0	N/A	N/A	N/A	N/A	N/A
Tin	7440-31-5	N/A	N/A	N/A	N/A	N/A

Mutagenic effects	No information available
Reproductive effects	No information available
Developmental effects	No information available
Teratogenicity	No information available.
STOT - single exposure	None known
STOT - repeated exposure	None known
Aspiration hazard	No information available
Symptoms / effects, both acute and delayed	No information available
Endocrine disruptor information	No information available
Other adverse effects	See actual entry in RTECS for complete information.

12. ECOLOGICAL INFORMATION

Ecotoxicity Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Lead	Not listed	Not listed	Not listed	Not listed
Antimony	Not listed	Not listed	Not listed	Not listed
Tin	Not listed	Not listed	Not listed	Not listed

Persistence and degradability	No information available
Bioaccumulation/ accumulation	No information available.
Mobility	No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Methods: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification

14. TRANSPORT INFORMATION

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS

Legend:
X – Listed

E *Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.*
F *Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.*
N *Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.*
P *Indicates a commenced PMN substance*
R *Indicates a substance that is the subject of a Section 6 risk management rule under TSCA*
S *Indicates a substance that is identified in a proposed or final Significant New Use Rule*
T *Indicates a substance that is the subject of a Section 4 test rule under TSCA.*
XU *Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).*
Y1 *Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.*
Y2 *Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.*

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Cupric sulfate	7758-98-7	98	1.0

SARA 311/312 Hazardous Categorization

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive hazard	No

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Lead	X	10 lb	X	

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration Not applicable

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Lead	10 lb	-

US State Regulations California Proposition 65
This product does not contain any Proposition 65 chemicals

US State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Lead	x	x	x	-	-

U.S. Department of Transportation

Reportable quantity (RQ) N
DOT Marine pollutant N DOT Severe
Marine pollutant N
U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations
Mexico - Grade No information available
Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard class D1B Toxic materials D2B Toxic materials

16. OTHER INFORMATION

Creation Date May-2015
Revision Date May-2015
Print Date May-2015
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

DISCLAIMER

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.