

**SAFETY DATA SHEET**

**ALLOY SN-PB**

**Section 1. Identification**

**GHS Product Identifier :** ALLOY Sn-Pb

**Other means of identification :** For all Sn-Pb alloys

**Product type :** Solid

**Relevant identified uses of the substance or mixture and uses advised against**

Not applicable

**Supplier’s details :** Conquest Industries

 12740 Lakeland Road

 Santa Fe Springs, CA 90670

 (562) 906-1111

**Section 2. Hazards identification**

**OSHA/HCS status :** This material is considered hazardous by the OSHA Hazard Communication

 Standard (29 CFR 1910.1200).

**Classification of the substance or**

**mixture :** CARCINOGENICITY – Category 2

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 100%

**GHS label elements**

 **Hazard pictograms :** 

 **Signal word :** Warning.

 **Hazard statements :** Suspected of causing cancer.

**Precautionary statements**

**Prevention :** Obtain special instructions before use. Do not handle until all safety pre-

 cautions have been read and understood. Use personal protective equipment as

 required.

**Response :** IF exposed or concerned: Get medical attention.

**Storage :** Store locked up.

**Disposal :** Dispose of contents and container in accordance with all local, regional,

 national and international regulations.

**Hazards not otherwise classified :** None known.

**Section 3. Composition/information on ingredients**

**Substance/mixture :** Mixture

**Other means of identification :** For all Sn-Pb alloys, Durapure 50/50, Leaded solder sphere

**CAS number/other identifiers**

 **CAS number :** Not applicable.

 **Product code :** Not available.

|  |  |  |
| --- | --- | --- |
| **Ingredient name** | **%** | **CAS number** |
| lead | 1-99 | 7439-92-1 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

**Occupational exposure limits, if available are listed in Section 8.**

**Section 4. First aid measures**

**Description of necessary first aid measures**

 **Eye contact :** Immediately flush eyes with plenty of water, occasionally lifting the upper and

lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

 **Inhalation :** Remove victim to fresh air and keep at rest in position comfortable for breath-

 ing. If not breathing, if breathing is irregular or if respiratory arrest occurs,

provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact :** Flush contaminated skin with plenty of water. Remove contaminated clothing

 and shoes. Continue to rinse for at least 10 minutes. Get medical attention.

 Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion :** Wash out mouth with water. Remove victim to fresh air and keep at rest in a

 position comfortable for breathing. If material has been swallowed and the

 exposed person is conscious, give small quantities of water to drink. Do not

 induce vomiting unless directed to do so by medical personnel. If vomiting

 occurs, the head should be kept low so that vomit does not enter the lungs. Get

 medical attention. Never give anything by mouth to an unconscious person. If

 unconscious, place in recovery position and get medical attention immediately.

 Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or

 waistband.

**Most important symptoms/effects, acute and delayed**

 **Potential acute health effects**

 **Eye contact :** No known significant effects or critical hazards.

 **Inhalation :** No known significant effects or critical hazards.

 **Skin contact :** No known significant effects or critical hazards.

 **Ingestion :** No known significant effects or critical hazards.

 **Over-exposure signs/symptoms**

 **Eye contact :** No specific data.

 **Inhalation :** No specific data.

 **Skin contact :** No specific data.

 **Ingestion :** No specific data.

**Indication of immediate medical attention and special treatment needed, if necessary**

 **Note to physician :** Treat symptomatically. Contact poison treatment specialist immediately if

 large quantities have been ingested or inhaled.

 **Specific treatments :** No specific treatment.

 **Protection of first-aiders :** No action shall be taken involving any personal risk or without suitable

 training.

**See toxicological information (Section 11)**

**Section 5. Fire-fighting measures**

**Extinguishing media**

 **Suitable extinguishing media :** Use an extinguishing agent suitable for the surrounding fire.

 **Unsuitable extinguishing media :** None known.

 **Specific hazards arising from**

 **the chemical :** No specific fire or explosion hazard.

 **Hazardous thermal decom-**

 **position products :** Decomposition products may include the following materials:

 metal oxide/oxides

 **Special protective actions for**

 **fire-fighters :** Promptly isolate the scene by removing all persons from the vicinity of the

 incident if there is a fire. No action shall be taken involving any personal risk

 or without suitable training.

 **Special protective equipment**

 **for fire-fighters :** Fire-fighters should wear appropriate protective equipment and self-contained

 breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Section 6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

 **For non-emergency personnel :** No action shall be taken involving any personal risk or without suitable train-

 ing. Evacuate surrounding areas. Keep unnecessary and unprotected personnel

 from entering. Do not touch or walk through spilled material. Provide adequate

 ventilation. Wear appropriate respirator when ventilation is inadequate. Put on

 appropriate personal protective equipment.

 **For emergency responders :** If specialized clothing is required to deal with the spillage, take note of any

 information in Section 8 on suitable and unsuitable materials. See also the in-

 formation in “For non-emergency personnel”.

 **Environmental precautions :** Avoid dispersal of spilled material and runoff and contact with soil, waterways

 drains and sewers. Inform the relevant authorities if the product has caused

 environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up**

 **Small spill :** Move containers from spill area. Avoid dust generation. Do not dry sweep.

 Vacuum dust with equipment fitted with a HEPA filter and place in a closed,

 labeled waste container. Dispose of via a licensed waste disposal contractor.

 **Large spill :** Move containers from spill area. Approach release from upwind. Prevent entry

 into sewers, water courses, basements or confined areas. Avoid dust generation

 Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and

 place in a closed, labeled waste container. Dispose of via a license waste

 disposal contractor. Note: see Section 1 for emergency contact information and

 Section 13 for waste disposal.

**Section 7. Handling and storage**

**Precautions for safe handling**

 **Protective measures :** Put on appropriate personnel protective equipment (see Section 8). Avoid ex-

 posure – obtain special instructions before use. Do not handle until all safety

 precautions have been read and understood. Do not get in eyes or on skin or

 clothing. Do not ingest. If during normal use the material presents a respiratory

 hazard, use only with adequate ventilation or wear appropriate respirator. Keep

 in the original container or an approved alternative made from a compatible

 material, kept tightly closed when not in use. Empty containers retian product

 residue and can be hazardous. Do not reuse container.

 **Advice on general occupational**

 **hygiene :** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before

 eating, drinking and smoking. Remove contaminated clothing and protective

 equipment before entering eating areas. See also Section 8 for additional in-

 formation on hygiene measures.

 **Conditions for safe storage,**

 **Including any incompatibilities :** Store in accordance with local regulations. Store in original container protected

 from direct sunlight in a dry, cool and well-ventilated area, away from in-

compatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Container that

have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**Section 8. Exposure controls/personal protection**

**Control parameters**

 **Occupational exposure limits**

|  |  |
| --- | --- |
| **Ingredient name** | **Exposure limits** |
| lead | **ACGIH TLV (United States, 6/2013).**TWA: 0.05 mg/m³, (as Pb) 8 hours.**NIOSH REL (United States, 1/2013).**TWA: 0.05 mg/m³ 10 hours.**OSHA PEL (United States, 2/2013).**TWA: 50 µg/m³, (as Pb) 8 hours. |

**Appropriate engineering controls :** If user operations generate dust, fumes, gas, vapor or mist, use process en-

 closures, local exhaust ventilation or other engineering controls to keep worker

 exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls :** Emissions from ventilation or work process equipment should be checked to

 ensure they comply with the requirements of environmental protection legisla-

 tion. In some cases, fume scrubbers, filters or engineering modifications to the

 process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

 **Hygiene measures :** Wash hands, forearms and face thoroughly after handling chemical products,

 before eating, smoking and using the lavatory and at the end of the working

 period. Appropriate techniques should be used to remove potentially contamin-

 ated clothing. Wash contaminated clothing before reusing. Ensure that eyewash

 stations and safety showers are close to the workstation location.

 **Eye/face protection :** Safety eyewear complying with an approved standard should be used when a

 risk assessment indicates this is necessary to avoid exposure to liquid splashes,

 mists, gases or dusts. If contact is possible, the following protection should be

 worn, unless the assessment indicates a higher degree of protection: safety

 glasses with side-shields.

**Skin protection**

 **Hand protection :** Chemical-resistant, impervious gloves complying with an approved standard

 should be worn at all times when handling chemical products if a risk assess-

 ment indicates this is necessary. Considering the parameters specified by the

 glove manufacturer, check during use that the gloves are still retaining their

 protective properties. It should be noted that the time to breakthrough for any

 any glove material may be different for different glove manufacturers. In the

 case of mixtures, consisting of several substances, the protection time of the

 gloves cannot be accurately estimated.

 **Body protection :** Personal protective equipment for the body should be selected based on the

 task being performed and the risks involved and should be approved by a

 specialist before handling this product.

 **Other skin protection :** Appropriate footwear and any additional skin protection measures should be

 selected based on the task being performed and the risks involved and should

 be approved by a specialist before handling this product.

**Respiratory protection :** Use properly fitted, particulate filter respirator complying with an approved

 standard if a risk assessment indicates this is necessary. Respirator selection

 must be based on known or anticipated exposure levels, the hazards of the

 product and the safe working limits of the selected respirator.

**Section 9. Physical and chemical properties**

**Appearance**

 **Physical state :** Solid. [bar, ingot, solid wire, preforms]

 **Color :** Colorless.

**Odor :** Not available.

**Odor threshold :** Not available.

**pH :** Not available.

**Melting point :** Not available.

**Boiling point :** Not available.

**Flash point :** Not available.

**Evaporation rate :** Not available.

**Flammability (solid, gas) :** Not available.

**Lower and upper explosive**

**(flammable) limits :** Not available.

**Vapor pressure :** Not available.

**Vapor density :** Not available.

**Relative density :** Not available.

**Solubility :** Insoluble in the following materials: cold water, hot water, methanol, diethyl

 ether, noctanol and acetone.

**Partition coefficient: noctanol/**

**water :** Not available.

**Auto-ignition temperature :** Not available.

**Decomposition temperature :** Not available.

**Viscosity :** Not available.

**Section 10. Stability and reactivity**

**Reactivity :** No specific test data related to reactivity available for this product or its

 ingredients.

**Chemical stability :** The product is stable.

**Possibility of hazardous reactions :** Under normal conditions of storage and use, hazardous reactions will not occur

**Conditions to avoid :** No specific data.

**Incompatible materials :** No specific data.

**Hazardous decomposition**

**products :** Under normal conditions of storage and use, hazardous decomposition

 products should not be produces.

**Section 11. Toxicological information**

**Information of toxicological effects**

 **Acute toxicity**

Not available.

 **Irritation/Corrosion**

Not available.

 **Sensitization**

Not available.

 **Mutagenicity**

Not available.

 **Carcinogenicity**

Not available.

 **Conclusion/Summary :** Human LEAD crosses the placental barrier.

 CHRONIC OVEREXPOSURE EFFECTS; Increase of LEAD

 LEVEL in blood, muscle soreness, metallic taste, abdominal cramps,

 headaches.

**Classification**

|  |  |  |  |
| --- | --- | --- | --- |
| **Product/ingredient name** | **OSHA** | **IARC** | **NTP** |
| lead | - | 2B | Reasonably anticipated to be a human carcinogen. |

 **Reproductive toxicity**

Not available.

 **Teratogenicity**

Not available.

 **Specific target organ toxicity (single exposure)**

Not available.

 **Specific target organ toxicity (repeated exposure)**

Not available.

 **Aspiration hazard**

Not available.

**Information on the likely routes**

**of exposure :** Routes of entry not anticipated: Dermal.

**Potential acute health effects**

 **Eye contact :** No known significant effects or critical hazards.

 **Inhalation :** No known significant effects or critical hazards.

 **Skin contact :** No known significant effects or critical hazards.

 **Ingestion :** No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

 **Eye contact :** No specific data.

 **Inhalation :** No specific data.

 **Skin contact :** No specific data.

 **Ingestion :** No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

 **Short term exposure**

 **Potential immediate effects :** Not available.

 **Potential delayed effects :** Not available.

 **Long term exposure**

 **Potential immediate effects :** Not available.

 **Potential delayed effects :** Not available.

 **Potential chronic health effects**

Not available.

 **General :** No known significant effects or critical hazards.

 **Carcinogenicity :** Suspected of causing cancer. Risk of cancer depends on duration and level of

 exposure.

 **Mutagenicity :** No known significant effects or critical hazards.

 **Teratogenicity :** No known significant effects or critical hazards.

 **Developmental effects :** No known significant effects or critical hazards.

 **Fertility effects :** No known significant effects or critical hazards.

**Numerical measures of toxicity**

 **Acute toxicity estimates**

 Not available.

**Other information :** To the best of our knowledge, the information contained herein is accurate.

 However, neither the above-named supplier, nor any of its subsidiaries,

 assumes any liability whatsoever for the accuracy of completeness of the in-

 formation contained herein. Final determination of suitability of any material is

 the sole responsibility of the user. All certain hazards are described herein, we

 cannot guarantee that these are the only hazards that exist.

**Section 12. Ecological information**

**Toxicity**

|  |  |  |  |
| --- | --- | --- | --- |
| **Product/ingredient name** | **Result** | **Species** | **Exposure** |
| lead | Acute EC50 105 ppb Marine waterAcute EC50 0.489 mg/l Marine waterAcute EC50 8000 µg/l Fresh waterAcute LC50 530 µg/l Fresh waterAcute LC50 4400 µg/l Fresh waterAcute LC50 0.44 ppm Fresh waterChronic NOEC 0.25 mg/l Marine water Chronic NOEC 0.03 µg/l Fresh water | Algae – Chaetoceros sp. –Exponential growth phaseAlgae – Ulva pertusaAquatic plants – Lemna minorCrustaceans – CeriodaphniareticulataDaphnia – Daphia magnaFish – Cyprinus carpio – Juvenile(Fledgling, Hatchling, Weanling)Algae – Ulva pertusaFish – Cyprinus carpio | 72 hours96hours4days48 hours48 hours96 hours96 hours4 weeks |

**Persistence and degradability**

Not available.

**Bioaccumulative potential**

Not available.

**Mobility in soil**

 **Soil/water partition coefficient**

 **(Koc) :** Not available

 **Other adverse effects :** No known significant effects or critical hazards.

**Section 13. Disposal considerations**

**Disposal methods :** The generation of waste should be avoided or minimized wherever possible.

 Disposal of this product, solutions and any by-products should at all times

 comply with the requirements of environmental protection and waste disposal

 legislation and any regional local authority requirements. Dispose of surplus

 and non-recyclable products via a licensed waste disposal contractor. Waste

 should not be disposed of untreated to the sewer unless fully compliant with

 the requirements of all authorities with jurisdiction. Waste packaging should be

 recycled. Incineration or landfill should only be considered when recycling is

 not feasible. This material and its container must be disposed of in a safe way.

 Empty containers or liners may retain some product residues. Avoid dispersal

 of spilled material and runoff and contact with soil, waterways, drains and sew-

 ers.

**Section 14. Transport information**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **DOT****Classification** | **TDG****Classification** | **Mexico****Classification** | **ADR/RID** | **IMDG** | **IATA** |
| **UN number** | Not regulated. | Not regulated. | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| **UN proper shipping name** | - | - | - | - | - | - |
| **Transport****hazard class(es)** | - | - | - | - | - | - |
| **Packing group** | - | - | - | - | - | - |
| **Environmental****hazards** | No. | No. | No. | No. | No. | No. |
| **Additional** **information** | - | - | - | - | - | - |

**Special precautions for user : Transport within user’s premises:** always transport in closed containers that

 are upright and secure. Ensure that persons transporting the product know what

 to do in the event of an accident or spillage.

**Transport in bulk according to**

**Annex II of MARPOL 73/78**

**and the IBC Code :** Not available.

**Section 15. Regulatory information**

**U.S. Federal regulations :** **TSCA 6 proposed risk management:** lead

 **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined

 **TSCA 12(b) one-time export:** lead

 All components are listed or exempted.

 **Clean Water Act (CWA) 307:** lead

**Clean Air Act Section 112 (b)**

**Hazardous Air Pollutants (HAPs) :** Not listed

**Clean Air Act Section 602 Class I**

**Substances :** Not listed

**Clean Air Act Section 602 Class II**

**Substances :** Not listed

**DEA List I Chemicals (Precursor**

**Chemicals) :** Not listed

**DEA List II Chemicals (Essential**

**Chemicals) :** Not listed

**SARA 302/304**

 **Composition/information on ingredients**

No products were found.

 **SARA 304 RQ :** Not applicable.

**SARA 311/312**

 **Classification :** Delayed (chronic) health hazard

**Composition/information on ingredients**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Name** | **%** | **Fire** **hazard** | **Sudden****release of****pressure** | **Reactive** | **Immediate****(acute)****health** **hazard** | **Delayd****(chronic)****health** **hazard** |
| lead | 1-99 | No. | No. | No. | No. | Yes. |

**SARA 313**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Product name** | **CAS number** | **%** |
| **Form R – Reporting****requirements** | lead | 7439-92-1 | 1-99 |
| **Supplier notification** | lead | 7439-92-1 | 1-99 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

**State regulations**

 **Massachusetts :** The following components are listed: TIN; LEAD

 **New York :** The following components are listed: lead

 **New Jersey :** The following components are listed: TIN; LEAD

**Pennsylvania :** The following components are listed: TIN; LEAD

**California Prop. 65**

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ingredient name** | **Cancer** | **Reproductive** | **No significant risk****level** | **Maximum** **acceptable dosage****level** |
| lead | Yes. | Yes. | 15µg/day (ingestion)0.0005 µg/day(inhalation) | Yes. |

**International regulations**

 **Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol (Annexes A, B, C, E)**

Not listed.

**Stockholm Convention of Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Inform Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**International lists**

 **National inventory**

 **Australia :** All components are listed or exempted.

 **Canada :** All components are listed or exempted.

 **China :** All components are listed or exempted.

 **Europe :** All components are listed or exempted.

 **Japan :** Not determined.

 **Malaysia :** Not determined.

 **New Zealand :** All components are listed or exempted.

 **Philippines :** All components are listed or exempted.

 **Republic of Korea :** All components are listed or exempted.

 **Taiwan :** All components are listed or exempted.

**Section 16. Other information**

**Hazardous Material Information System (U.S.A.)**

|  |  |
| --- | --- |
| Health  | 0 |
| Flammability | 0 |
| Physical hazards | 0 |

**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDS under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.**

**The customer is responsible for determining the PPE code for this material.**

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

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**hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.**

**History**

 **Date of printing :** 5/19/2015

 **Date of issue/Date of revision :** 5/19/2015

 **Date of previous issue version :** No previous validation

 **Version :** 0.01

**Key to abbreviations :** ATE = Acute Toxicity Estimate

 BCF = Bioconcentration Factor

 GHS = Globally Harmonized System of Classification and Labelling of

 Chemicals

 IATA = International Bulk Container

 IBC = Intermediate Bulk Container

 IMDG = International Maritime Dangerous Goods

 LogPow = Iogarithm of the octanol/water partition coefficient

 MARPOL 73/78 = International Convention for the Prevention of Pollution

 From Ships, 1973 as modified by the Protocol of 1978.

 (“Marpol” = marine pollution)

 UN = United Nations

**References :** Not available.

**Notice to reader**

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**

**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**