



SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY INFORMATION

Product Name: Lead Alloy; Soft Lead Alloy
Chemical Family: Metal
Product Use: Alloy
SDS #: SLC-SL2013
Revision Date: 09/20/2013
Manufacturer: Sanders Lead Company, Inc.
P.O. Box 707
Troy, Alabama 36081, USA
(334) 566-1563

EMERGENCY PHONE (24hrs): Sanders Lead Co. (800) 633-8744
CHEMTREC (800) 424-9300 (24hrs)

2.0 HAZARDS IDENTIFICATION

General Hazard Statement: Solid metallic products are generally classified as “articles” and do not constitute hazardous materials in solid form under the OSHA Hazard Communication Standard (29 CFR 1910.1200). However, subsequent processing of this product such as: grinding, melting, welding, cutting, brazing or other processes may cause the release of dust, fumes or small particles that may produce potentially hazardous levels of airborne particulates which can be inhaled, swallowed, or come into contact with the skin or eyes.

GHS Classification:

Serious Eye Damage/irritation – Category 2B
Respiratory Sensitizer – Category 1
Skin Sensitizer – Category 1
Germ Cell Mutagenicity– Category 1
Carcinogenicity – Category 2
Toxic to reproduction – Category 1B
Specific target organ toxicity - Single exposure – Category 1 (central nervous system, blood system, and liver)
Specific target organ toxicity - Repeated exposure – Category 1 (central nervous system, blood system, and liver)
Hazardous to aquatic environment - Acute Hazard – Category 1
Hazardous to aquatic environment - Chronic Hazard – Category 1

GHS LABEL ELEMENTS:



GHS 07



GHS 08



GHS09

Signal Word:

Danger

Hazard Statements:

Causes eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause allergic skin reaction
Suspected of causing genetic defects



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Hazard Statements (continued):

- Suspected of causing cancer
- Causes damage to organs (kidneys, liver, central nervous system, respiratory system)
- Causes damage to organs through prolonged or repeated exposure
- Very toxic to aquatic life
- Very toxic to aquatic life with long lasting effects

Precautionary Statements:

Prevention:

- Do not breathe dust/fume/gas/mist/vapors/spray
- In case of inadequate ventilation wear respiratory protection
- Contaminated work clothing should not be allowed out of the workplace
- Wash thoroughly after handling
- Wear protective gloves
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personnel protective equipment as required
- Do not eat, drink, or smoke when using this product
- Avoid release to the environment

Response:

- IF EXPOSED OR CONCERNED: Get medical advice/attention
- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- 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/evaluation.
- IF EXPERIENCING RESPIRATORY SYMPTOMS: Call a POISON CENTER or doctor/physician.
- IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs, get medical advice/evaluation
- Wash contaminated clothing before reuse
- Collect spillage

STORAGE:

- Store locked up

DISPOSAL:

- Dispose of contents/containers in accordance with local/regional/international regulations

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	%Weight
Lead	7439-92-1	99+%

See section 8.0 for Exposure Limits

4.0 FIRST AID MEASURES

First Aid: Eyes

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Consult a physician.

First Aid: Skin

Wash skin with soap and water. In case of skin irritation or allergic reactions see a physician

First Aid: Ingestion

Do NOT induce vomiting. Call a physician or Poison Control Center immediately. Drink plenty of water. Never give anything by mouth to an unconscious person.

First Aid: Inhalation

Move to fresh air. If breathing is difficult, give oxygen. If not breathing give artificial respiration. Consult a physician.



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5.0 FIRE FIGHTING MEASURES

General Fire Hazards

See Section 9.0 for Flammability Properties

This Product does not present fire or explosion hazards as shipped. Small chips, fines, and dust from processing may be readily ignitable

Hazardous Combustion Products

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact.

Extinguishing Media

Class D extinguishing agents on fines, dust or molten metal. Use coarse water spray on chips and fines.

Unsuitable Extinguishing Media

DO NOT use halogenated agents on small chips or fines. DO NOT use water for fires involving molten metal due to the potential for a steam explosion. These fire extinguishing agents will react with burning material.

Fire Fighting Equipment/Instructions

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6.0 ACCIDENTAL RELEASE MEASURES

Recovery and Neutralization

Avoid dust formation. Use normal clean-up procedures, wet sweeping or HEPA vacuum for cleanup of dust or fines. Collect scrap and chips for recycling.

Materials and Methods for Clean-up

If product is molten, contain flow using dry sand or salt flux as a dam. All tools and containers which come into contact with molten metal must be preheated or specially coated and rust free. Allow spill to cool before recycling as scrap.

Emergency Measures

Keep people away from and upwind of spill/leak.

Personal Precautions and Protective Equipment

Wear appropriate protective clothing and respiratory protection for the situation.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do Not flush into surface water or sanitary sewer system.

Prevention of Secondary Hazards

None

7.0 HANDLING AND STORAGE

Handling Procedures

Avoid contact with skin, eyes, and clothing. Wear personal protective equipment. Avoid dust formation. Keep material dry. Avoid contact with sharp edges or heated material.

Storage Procedures

Keep containers tightly closed in a dry and well-ventilated location.

Incompatibilities

Acids, Strong Oxidizers (will react with oxidizing agents), Hydrogen Peroxide, Water (when in molten state)

8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION

Component Exposure Limits

Lead (7439-92-1)

ACGIH: 0.05 mg/m³ TWA

OSHA: 30 µg/m³ Action Level, 50 µm/m³ PEL (Poison, see 29 CFR 1910.1025)

NIOSH: 0.050 mg/m³ TWA

Engineering Measures

When feasible, enclose processes to prevent dust dispersion into the work area. Provide local exhaust when possible, and general ventilation as necessary, to keep airborne concentrations below exposure limits and as low as possible.



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PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Respiratory

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Personal Protective Equipment: Eyes

Wear safety gasses with side shields and/or goggles as necessary to prevent dust from entering eyes.

Personal Protective Equipment: Hands

Use impervious gloves such as neoprene, nitrile, or rubber for hand protection.

Personal Protective Equipment: Skin and Body

Use body protection appropriate for task.

Hygiene Measures

Do not breathe vapors/dust. When using, do not eat, drink, or smoke. Provide regular cleaning of equipment, work area, and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink, and animal feeding stuffs.

9.0 PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Heavy, ductile, silver/gray metallic	Odor:	None
Physical State:	Solid	pH:	NA
Vapor Pressure:	ND	Vapor Density:	ND
Boiling Point:	3164°F	Melting Point:	621°F
Solubility (H ₂ O):	Insoluble	Specific Gravity:	11.34
Vapor Pressure:	0 mm Hg	Molecular Weight:	207.2
Flash Point:	NA	LEL:	NA
Auto Ignition:	NA	UEL:	NA
Ionization Potential:	NA	VOC:	NA

10.0 CHEMICAL STABILITY & REACTIVITY INFORMATION

Chemical Stability

Stable under recommended storage conditions.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

Dust formation. Protect from water when molten.

Incompatible Products

Acids, Strong Oxidizers, Hydrogen Peroxide, Water – when molten.

Hazardous Decomposition Products

Toxic metal oxide fumes. Lead oxide fumes.

11.0 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Component Analysis – LD50/LC50

Lead (7439-92-1)

No data available

Potential Health Effects: Inhalation

May be harmful if inhaled. Inhalation of dust in high concentrations may cause irritation of the respiration system.

Potential Health Effects: Eyes

Dust contact with eyes can lead to mechanical irritation.

Potential Health Effects: Ingestion

May be harmful if swallowed. If swallowed in high concentrations may cause irritation of the GI system.

Potential Health Effects: Skin

Contact with dust can cause mechanical irritation or drying of the skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.



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Carcinogenicity

General Product Information

Suspected of causing cancer

Component Carcinogenicity

Lead (7439-92-1)

ACGIH: A3 – Confirmed animal carcinogen with unknown relevance to humans

OSHA: 30 ug/m³ Action Level (Poison, See CFR 29 1910.1025); 50 ug/m³ TWA

NTP: Reasonably anticipated to be a human carcinogen (Possible Select Carcinogen)

IARC: Group 2A (probably carcinogenic to humans)

Reproductive Toxicity

Lead may damage the reproductive system and cause developmental damage

Target Organs

Eyes, gastrointestinal tract, central nervous system, kidneys, blood, gingival tissue

12.0 ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence/Degradability

Metal powders in water may cause ecological damage through silting or sedimentation effect in water depriving organisms of habitat and mobility, and/or fouling gills, lungs, and skin thus limiting oxygen uptake.

Bioaccumulation

Metal powders in water and soil may form metal oxides or other metal compounds that could become bioavailable and harm aquatic or terrestrial organisms.

Mobility in Soil

Metal powder would be relatively immobile in soils but some metal compounds may be transported with groundwater.

13.0 DISPOSAL CONSIDERATIONS

US EPA Waste Numbers and Descriptions

This product contains components identified as hazardous under 40 CFR 261.24

Lead (7439-92-4): RCRA 5.0 mg/L regulatory level

Waste Disposal Instructions

See Section 7.0 for handling Procedures. See Section 8.0 for Personnel Protective Equipment recommendations.

Byproducts and residues from this product may be reprocessed or recycled. Upon disposal, collected dusts and other similar wastes could contain a constituent identified as a hazardous waste. Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

Disposal of Contaminated Containers or Packaging

Disposal of contents/containers in accordance with local/regional/national/international regulations.

14.0 TRANSPORTATION INFORMATION

DOT Information

The product is not covered by international regulation on the transport of dangerous goods (IMDG, ICAO, IATA, DOT)

Shipping Name

Certain forms of this material (i.e. powders, borings, shavings, turnings, cuttings, dross, etc.) may be subject to U.S. DOT hazardous material shipping requirements. If products are shipped in quantities which exceed the reportable quantity (RQ) for individual components, they may also meet the requirements as DOT hazardous materials.

UN/NA #: Not available.

Hazard Class: Not available.

Packing Group: Not available.



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Transport Labels

Placards – None Required

Shipping Labels: *“DANGER LEAD. This product is harmful if inhaled or ingested. Excessive absorption of lead into the body may result in damage to the blood, neurological, and/or reproductive systems. Use only with adequate ventilation or respiratory protection. Wash thoroughly after handling and before eating, drinking, or smoking.”*

Special Precautions

Heavy weight by volume is associated with lead and lead products. Use proper lifting, handling, and loading techniques. Always use proper hygiene after handling.

Component Marine Pollutants

This material does not contain any chemicals required by US DOT to be identified as marine pollutants.

15.0 REGULATORY INFORMATION

HMIS Rating: Lead	Health = 2*	Flammability= 0	Physical Hazard = 0
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HMIS uses the asterisk (*) to convey the presence of a chronic hazard

Regulatory Information

Federal Regulations

Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Lead (7439-92-1)

SARA 313: 0.1 % Supplier notification limit; 0.1 % de minimis concentration (when contained in stainless steel, brass, or bronze)

CERCLA: 10 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 4.54 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)

Component Marine Pollutants

This material does not contain any chemicals required by US DOT to be identified as marine pollutants.

State Regulations

The following component appears on one or more of the following state hazardous substances list:

Component	CAS#	CA	FL	MA	MN	NJ	PA
Lead	7439-92-1	Yes	No	Yes	Yes	Yes	Yes

The following statements are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

Canadian WHMIS Information

The following component is identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS#	Minimum Concentration
Lead	7439-92-1	0.1%

Other Regulations

This product is listed on the U.S. EPA TSCA Inventory

Component	CAS#	TSCA	DSL	EINICS
Lead	7439-92-1	Yes	Yes	Yes

16.0 OTHER INFORMATION

Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information.



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The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

MSDS History:

New MSDS: 9/24/13

Revision: NA

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average; EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; TLV = Threshold Limit Value; NFPA = National Fire Protection Association; HMIS = High Efficiency Particulate Air; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act.

Literature References

None

This is the end of MSDS # SLC-SL2013