

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 03/29/2016

Revision: 03/29/2016

1 Identification

- **Product identifier**
- **Trade name:** Hard Lead
- **Recommended use and restriction on use**
- **Recommended use:**
Industrial uses.
Raw materials.
- **Restrictions on use:** Contact manufacturer
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Gopher Resource, LLC
685 Yankee Doodle Road
Eagan, Minnesota 55121
Phone: 800-354-7451
- **Emergency telephone number:**
ChemTel Inc.
+1 (800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- **Classification of the substance or mixture**
Carc. 1A H350 May cause cancer.
Repr. 1 H360 May damage fertility or the unborn child.
STOT RE 1 H372 Causes damage to the central nervous system, the kidneys and the blood through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.

-
- **Label elements**
 - **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
 - **Hazard pictograms:**



GHS08

- **Signal word:** Danger
- **Hazard-determining components of labeling:**
lead
arsenic
- **Hazard statements:**
H350 May cause cancer.
H360 May damage fertility or the unborn child.
H372 Causes damage to the central nervous system, the kidneys and the blood through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.
- **Precautionary statements:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

(Cont'd. on page 2)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 03/29/2016

Revision: 03/29/2016

Trade name: Hard Lead

(Cont'd. of page 1)

- P260 Do not breathe vapors.
- P264 Wash thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P270 Do not eat, drink or smoke when using this product.
- P314 Get medical advice/attention if you feel unwell.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system**· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 0
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = *1
Fire = 0
Reactivity = 0

Warning: Contains lead salt(s). Long-term health hazard.

* - Indicates a long term health hazard from repeated or prolonged exposures.

- **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients· **Chemical characterization: Mixtures**· **Components:**

7439-92-1	lead	Carc. 2, H351; Repr. 1A, H360; STOT RE 1, H372	>80%
7440-36-0	antimony		5-<10%
7440-38-2	arsenic	Acute Tox. 3, H301; Acute Tox. 3, H331 Carc. 1A, H350	0.1-1%

· **Additional information:**

For the wording of the listed Hazard Statements refer to section 16.

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

4 First-aid measures· **Description of first aid measures**

- **General information:** Contact with liquefied material causes thermal burns.

· **After inhalation:**

Supply fresh air.

Seek immediate medical advice.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· **After skin contact:**

Do not pull solidified product away from the skin.

Clean with water and soap.

(Cont'd. on page 3)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 03/29/2016

Revision: 03/29/2016

Trade name: Hard Lead

(Cont'd. of page 2)

If skin irritation is experienced, consult a doctor.

After contact with the molten product, cool rapidly with cold water.

Seek immediate medical help for blistering or open wounds.

· **After eye contact:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Unlikely route of exposure.

Rinse out mouth and then drink plenty of water.

· **Most important symptoms and effects, both acute and delayed:**

Nausea

Cramp

Profuse sweating

Thermal burns.

Disorientation

· **Danger:**

May cause cancer.

Danger of cerebral edema.

Danger of disturbed cardiac rhythm.

Danger of convulsion.

May damage fertility or the unborn child.

May be harmful if swallowed.

May be harmful if inhaled.

Causes damage to the central nervous system, the kidneys and the blood through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.

Thermal burns from liquefied material.

· **Indication of any immediate medical attention and special treatment needed:**

Contains Lead. Consult literature for specific antidotes.

Medical supervision for at least 48 hours.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

· **For safety reasons unsuitable extinguishing agents:** None.

· **Special hazards arising from the substance or mixture**

During heating or in case of fire poisonous gases are produced.

· **Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

· **Additional information:** Cool endangered product with water spray.

6 Accidental release measures

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

Wear protective equipment. Keep unprotected persons away.

(Cont'd. on page 4)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 03/29/2016

Revision: 03/29/2016

Trade name: Hard Lead

(Cont'd. of page 3)

- Ensure adequate ventilation.
- Avoid formation of dust.
- **Environmental precautions:** Avoid release to the environment.
- **Methods and material for containment and cleaning up:**
 - Pick up mechanically.
 - Send for recovery or disposal in suitable receptacles.
- **Reference to other sections:**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
 - Prevent formation of dust.
 - Any deposit of dust which cannot be avoided must be regularly removed.
 - Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.
- **Information about protection against explosions and fires:**
 - Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:**
 - Store away from foodstuffs.
 - Do not store together with alkalis (caustic solutions).
 - Do not store together with acids.
 - Store away from oxidizing agents.
- **Further information about storage conditions:**
 - Store in accordance with local/regional/national/international regulations.
- **Specific end use(s):** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**

7439-92-1 lead

PEL (USA)	Long-term value: 0.05* mg/m ³ *see 29 CFR 1910.1025
REL (USA)	Long-term value: 0.05* mg/m ³ *8-hr TWA, excl. lead arsenate; See PocketGuideApp.C
TLV (USA)	Long-term value: 0.05* mg/m ³ *and inorganic compounds, as Pb; BEI

(Cont'd. on page 5)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 03/29/2016

Revision: 03/29/2016

Trade name: Hard Lead

(Cont'd. of page 4)

EL (Canada)	Long-term value: 0.05 mg/m ³ R; IARC 2B
EV (Canada)	Long-term value: 0.05 mg/m ³ as Pb, Skin (organic compounds)
LMPE (Mexico)	Long-term value: 0.05 mg/m ³ A3, IBE

7440-36-0 antimony

PEL (USA)	Long-term value: 0.5 mg/m ³ as Sb
REL (USA)	Long-term value: 0.5 mg/m ³ as Sb
TLV (USA)	Long-term value: 0.5 mg/m ³ as Sb
EL (Canada)	Long-term value: 0.5 mg/m ³ as Sb
EV (Canada)	Long-term value: 0.5 mg/m ³
LMPE (Mexico)	Long-term value: 0.5 mg/m ³ como Sb

7440-38-2 arsenic

PEL (USA)	Long-term value: 0.5* 0.01** mg/m ³ as As; *organic**inorg. compds.; 29 CFR 1910.1018
REL (USA)	Ceiling limit value: 0.002 mg/m ³ as As; 15min; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.01 mg/m ³ as As; BEI
EL (Canada)	Long-term value: 0.01 mg/m ³ as As; ACGIH A1, IARC1
EV (Canada)	Short-term value: 0.05 mg/m ³ Long-term value: 0.01 mg/m ³ as As
LMPE (Mexico)	Long-term value: 0.01 mg/m ³ A1, IBE; como As

Ingredients with biological limit values:**7439-92-1 lead**

BEI (USA)	30 µg/100 ml Medium: blood Time: not critical Parameter: Lead
	10 µg/100 ml Medium: blood Time: not critical Parameter: Lead (women of child bearing potential)

(Cont'd. on page 6)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 03/29/2016

Revision: 03/29/2016

Trade name: Hard Lead

(Cont'd. of page 5)

7440-38-2 arsenic

BEI (USA)	35 µg As/L Medium: urine Time: end of workweek Parameter: Inorganic arsenic plus methylated metabolites (background)
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- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
Pregnant women should strictly avoid inhalation or skin contact.
Do not breathe fume.
- **Engineering controls:** Provide adequate ventilation.
- **Breathing equipment:**
For spills, respiratory protection may be advisable.
Avoid inhalation of the chemical/ the product/ the preparation by organizational measures.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Eye protection:**



Safety glasses

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment**
No relevant information available.
- **Risk management measures** See Section 7 for additional information.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **Appearance:**
 - **Form:** Solid material
 - **Color:** Silver-colored
- **Odor:** Odorless
- **Odor threshold:** Not determined.
- **pH-value:** Not applicable.

(Cont'd. on page 7)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 03/29/2016

Revision: 03/29/2016

Trade name: Hard Lead

(Cont'd. of page 6)

· Melting point/Melting range:	252 - 365 °C (486 - 689 °F)
· Boiling point/Boiling range:	Not determined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Product is not flammable.
· Auto-ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· Auto igniting:	Not determined.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not applicable.
· Density:	9.9 - 11.3 g/cm ³ (82.616 - 94.299 lbs/gal)
· Bulk density at 20 °C (68 °F):	5280 kg/m ³
· Relative density:	Not determined.
· Vapor density:	Not applicable.
· Evaporation rate:	Not applicable.
· Solubility in / Miscibility with Water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Other information	No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions:**
Reacts with strong acids and alkali.
Toxic fumes may be released if heated above the decomposition point.
Reacts with strong oxidizing agents.
- **Conditions to avoid:** Excessive heat.
- **Incompatible materials:** Oxidizers, strong bases, strong acids
- **Hazardous decomposition products:**
Leadoxide vapor
Arsenic compounds

(Cont'd. on page 8)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 03/29/2016

Revision: 03/29/2016

Trade name: Hard Lead

Toxic metal oxide smoke

(Cont'd. of page 7)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:** No irritant effect.
- **On the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

· **IARC (International Agency for Research on Cancer):**

7439-92-1	lead	2B
7440-38-2	arsenic	1

· **NTP (National Toxicology Program):**

7439-92-1	lead	R
7440-38-2	arsenic	K

· **OSHA-Ca (Occupational Safety & Health Administration):**

7440-38-2	arsenic	
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· **Probable route(s) of exposure:**

Inhalation.
Eye contact.
Skin contact.

· **Acute effects (acute toxicity, irritation and corrosivity):**

Thermal burns from liquefied material.
May be harmful in contact with skin.
May be harmful if inhaled.

· **Repeated dose toxicity:**

May cause metal fume disease.
May cause neurotoxic effects.
May cause cancer.
May damage fertility or the unborn child.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Carc. 1A, Repr. 1

· **Carcinogenicity:** Suspected of causing cancer.· **Reproductive toxicity:** May damage fertility or the unborn child.· **STOT-single exposure:** Based on available data, the classification criteria are not met.· **STOT-repeated exposure:**

Causes damage to the central nervous system, the kidneys and the blood through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.

· **Aspiration hazard:** Based on available data, the classification criteria are not met.

(Cont'd. on page 9)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 03/29/2016

Revision: 03/29/2016

Trade name: Hard Lead

(Cont'd. of page 8)

12 Ecological information

- **Toxicity**
- **Aquatic toxicity** The product contains materials that are harmful to the environment.
- **Persistence and degradability**
Inorganic product, is not eliminable from water by means of biological cleaning processes.
- **Bioaccumulative potential:** May be accumulated in organism
- **Mobility in soil:** No relevant information available.
- **Additional ecological information**
- **General notes:** Avoid release to the environment.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Hand over to hazardous waste disposers.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Can be reused after reprocessing.
Contact waste processors for recycling information.
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packagings**
- **Recommendation:**
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

14 Transport information

- | | |
|-------------------------------------|----------------|
| · UN-Number | |
| · DOT, ADR, IMDG, IATA | Not regulated. |
| · UN proper shipping name | |
| · DOT, ADR, IMDG, IATA | Not regulated. |
| · Transport hazard class(es) | |
| · DOT, ADR, IMDG, IATA | |
| · Class | Not regulated. |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | Not regulated. |

(Cont'd. on page 10)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 03/29/2016

Revision: 03/29/2016

Trade name: Hard Lead

(Cont'd. of page 9)

- | | |
|--|-----------------|
| · Environmental hazards | |
| · Marine pollutant: | No
Yes (DOT) |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

All ingredients are listed.

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

· **Proposition 65 (California)**· **Chemicals known to cause cancer:**

7439-92-1 | lead

7440-38-2 | arsenic

· **Chemicals known to cause reproductive toxicity for females:**

7439-92-1 | lead

· **Chemicals known to cause reproductive toxicity for males:**

7439-92-1 | lead

· **Chemicals known to cause developmental toxicity:**

7439-92-1 | lead

· **Carcinogenic categories**· **EPA (Environmental Protection Agency):**

7439-92-1 | lead

B2

7440-38-2 | arsenic

A

· **IARC (International Agency for Research on Cancer):**

7439-92-1 | lead

2B

7440-38-2 | arsenic

1

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

7440-38-2 | arsenic

(Cont'd. on page 11)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 03/29/2016

Revision: 03/29/2016

Trade name: Hard Lead

(Cont'd. of page 10)

· **Canadian substance listings**· **Canadian Domestic Substances List (DSL):**

All ingredients are listed.

· **Other regulations, limitations and prohibitive regulations**

OSHA STANDARDS 29 CFR1910.1018 AND 29CFR1910.1025 - WARNINGS FOR WORK AREAS

DANGER

LEAD / INORGANIC ARSENIC

MAY CAUSE CANCER

MAY DAMAGE FERTILITY OR THE UNBORN CHILD

CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM

DO NOT EAT, DRINK OR SMOKE IN THIS AREA

WEAR RESPIRATORY PROTECTION IN THIS AREA

AUTHORIZED PERSONNEL ONLY

OSHA STANDARDS 29 CFR1910.1018 AND 29CFR1910.1025 - WARNINGS FOR CONTAMINATED CLOTHING / EQUIPMENT

DANGER: CLOTHING AND EQUIPMENT CONTAMINATED WITH LEAD AND INORGANIC ARSENIC. MAY CAUSE CANCER. MAY DAMAGE FERTILITY OR THE UNBORN CHILD. CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM. DO NOT EAT, DRINK OR SMOKE WHEN HANDLING. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD AND INORGANIC ARSENIC CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE OR FEDERAL REGULATIONS.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 03/29/2016 / -· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

Acute Tox. 3: Acute toxicity, Hazard Category 3

Carc. 1A: Carcinogenicity, Hazard Category 1A

(Cont'd. on page 12)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 03/29/2016

Revision: 03/29/2016

Trade name: Hard Lead

(Cont'd. of page 11)

Carc. 2: Carcinogenicity, Hazard Category 2
Repr. 1: Reproductive toxicity, Hazard Category 1
Repr. 1A: Reproductive toxicity, Hazard Category 1A
STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

Sources

Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.
Safety Data Sheets, Individual Manufacturers

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