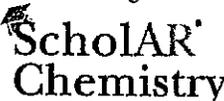


MSDS # 396.00

**Lead**

**Section 1: Product and Company Identification****Lead****Synonyms/General Names:** N/A**Product Use:** For educational use only**Manufacturer:** Columbus Chemical Industries, Inc., Columbus, WI 53925.**24 Hour Emergency Information Telephone Numbers****CHEMTREC (USA):** 800-424-9300**CANUTEC (Canada):** 613-424-6666

Scholar Chemistry; 5100 W. Henrietta Rd, Rochester, NY 14586; (866) 260-0501; www.Scholarchemistry.com

**Section 2: Hazards Identification***Bluish, silvery-gray soft metal, granular, shot, sheet, foil; no odor.***HMIS (0 to 4)**

**WARNING!** Moderately toxic by ingestion, absorbed through skin, possible carcinogen  
 Target organs: Nervous system, blood, kidneys

Health	3
Reactivity	0

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Section 3: Composition / Information on Ingredients**

Lead (7439-92-1), 100%

**Section 4: First Aid Measures***Always seek professional medical attention after first aid measures are provided.***Eyes:** Immediately flush eyes with excess water for 15 minutes, lifting lower and upper eyelids occasionally.**Skin:** Immediately flush skin with excess water for 15 minutes while removing contaminated clothing.**Ingestion:** Call Poison Control immediately. Rinse mouth with cold water. Give victim 1-2 cups of water or milk to drink. Induce vomiting immediately.**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration.**Section 5: Fire Fighting Measures**

When heated to decomposition, emits acrid fumes.

**Protective equipment and precautions for firefighters:** Use foam or dry chemical to extinguish fire.

Firefighters should wear full fire fighting turn-out gear and respiratory protection (SCBA). Cool container with water spray. Material is not sensitive to mechanical impact or static discharge.

**Section 6: Accidental Release Measures**

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Sweep up spill and place in sealed bag or container for disposal. Wash spill area after pickup is complete. See Section 13 for disposal information.

**Section 7: Handling and Storage****Green****Handling:** Use with adequate ventilation and do not breathe dust or vapor. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling.**Storage:** Store in General Storage Area [Green Storage] with other items with no specific storage hazards. Store in a cool, dry, well-ventilated, locked store room away from incompatible materials.**Section 8: Exposure Controls / Personal Protection**Use ventilation to keep airborne concentrations below exposure limits. Have approved eyewash facility, safety shower, and fire extinguishers readily available. Wear chemical splash goggles and chemical resistant clothing such as gloves and aprons. Wash hands thoroughly after handling material and before eating or drinking. Use NIOSH-approved respirator with an dust cartridge. Exposure guidelines: Lead: OSHA PEL: 0.05 mg/m<sup>3</sup>, ACGIH: TLV: 0.05 mg/m<sup>3</sup>, STEL: N/A.

**Section 9: Physical and Chemical Properties**

<b>Molecular formula</b>	Pb.	<b>Appearance</b>	Bluish/silvery-grey material.
<b>Molecular weight</b>	207.19.	<b>Odor</b>	None.
<b>Specific Gravity</b>	11.3 g/mL @ 20°C.	<b>Odor Threshold</b>	N/A.
<b>Vapor Density (air=1)</b>	N/A.	<b>Solubility</b>	Soluble in Dilute Nitric Acid.
<b>Melting Point</b>	327.4°C.	<b>Evaporation rate</b>	N/A. ( <i>Butyl acetate = 1</i> ).
<b>Boiling Point/Range</b>	1740°C.	<b>Partition Coefficient</b>	N/A. ( <i>log P<sub>OW</sub></i> ).
<b>Vapor Pressure (20°C)</b>	N/A.	<b>pH</b>	N/A.
<b>Flash Point:</b>	N/A.	<b>LEL</b>	N/A.
<b>Autoignition Temp.:</b>	N/A.	<b>UEL</b>	N/A.

N/A = Not available or applicable

**Section 10: Stability and Reactivity**

**Stability:** Stable under normal conditions of use and storage.

**Incompatibility:** Oxidizing materials.

**Shelf life:** Indefinite if stored properly.

**Section 11: Toxicology Information**

**Acute Symptoms/Signs of exposure:** *Eyes:* Redness, tearing, itching, burning, conjunctivitis. *Skin:* Redness, itching. *Ingestion:* Irritation and burning sensations of mouth and throat, nausea, vomiting and abdominal pain. *Inhalation:* Irritation of mucous membranes, coughing, wheezing, shortness of breath.

**Chronic Effects:** Possible carcinogen. Evidence now suggests that blood levels of lead below 10 µg/dL can have the effect of diminishing the IQ scores of children. Low levels of lead impair neurotransmission and immune system function and may increase systolic blood pressure. Severe toxicity can cause sterility, abortion, and neonatal mortality and morbidity. An experimental teratogen. Experimental reproductive effects.

**Sensitization:** none expected

*Lead: LD50 [oral, rat]; N/A; LC50 [rat]; N/A; LD50 Dermal [rabbit]; N/A*

*Material has been found to be a carcinogen and produce genetic, reproductive, or developmental effects.*

**Section 12: Ecological Information**

**Ecotoxicity (aquatic and terrestrial):** Marine pollutant. Contains a heavy metal – Toxic to terrestrial and aquatic plants and animals. Do not release to the environment

**Section 13: Disposal Considerations**

Check with all applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national regulations. Use licensed chemical waste disposal firm for proper disposal.

**Section 14: Transport Information**

<b>DOT Shipping Name:</b>	Environmental Hazardous Substance, solid, n.o.s., (Lead).	<b>Canada TDG:</b>	Environmental Hazardous Substance, solid, n.o.s. (Lead).
<b>DOT Hazard Class:</b>	9, pg III.	<b>Hazard Class:</b>	9, pg III, Marine pollutant.
<b>Identification Number:</b>	UN3077.	<b>UN Number:</b>	UN3077.

**Section 15: Regulatory Information**

**EINECS:** Listed (231-100-4).

**WHMIS Canada:** CLASS D2A: Very toxic material.

**TSCA:** All components are listed or are exempt.

**California Proposition 65:** Not listed.

*The product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.*

**Section 16: Other Information**

**Current Issue Date:** December 20, 2011

*Disclaimer: Scholar Chemistry and Columbus Chemical Industries, Inc., ("S&C") believes that the information herein is factual but is not intended to be all inclusive. The information relates only to the specific material designated and does not relate to its use in combination with other materials or its use as to any particular process. Because safety standards and regulations are subject to change and because S&C has no continuing control over the material, those handling, storing or using the material should satisfy themselves that they have current information regarding the particular way the material is handled, stored or used and that the same is done in accordance with federal, state and local law. S&C makes no warranty, expressed or implied, including (without limitation) warranties with respect to the completeness or continuing accuracy of the information contained herein or with respect to fitness for any particular use.*