



# CALDER INDUSTRIAL MATERIALS LTD

## SAFETY DATA SHEET FOR METALLIC LEAD

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

**PRODUCT NAME:** METALLIC LEAD      **Reference.**      DOCSH001      **Issue Number 7**      **September 2010**

**SYNONYMS, TRADE NAMES:**      LEAD, METALLIC LEAD

**SUPPLIER:**      Calder Industrial Materials Limited  
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### 2. COMPOSITION/INFORMATION ON INGREDIENTS:

**FORMULA:**      Pb.      **CAS No.:** 7439921

### 3. HAZARDS IDENTIFICATION:

Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed. Lead is a toxic metal.  
Various other metals may be present in alloys according to customer requirements/ specifications. Low concentrations of various metal impurities may be present.  
Oxidation or corrosion during storage will cause a surface film of compounds of lead.

### 4. FIRST AID MEASURES:

**INHALATION:** Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

**INGESTION:** NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS!

Get affected person to drink plenty of water or milk. After the liquid has been swallowed, try to induce vomiting by having affected person touch back of his throat with his finger. Get medical attention immediately.

**SKIN:** Remove affected person from source of contamination. Promptly flush with plenty of water if molten chemical gets on the skin or non-impervious clothing. Get medical attention immediately.

### 5. FIRE FIGHTING MEASURES:

**UNUSUAL FIRE & EXPLOSION HAZARDS:** May develop highly toxic fumes if heated.

**HAZARDOUS DECOMP. PRODUCTS:** Very toxic gases/vapours/fumes of: Lead. Oxides of: Lead.

### 6. ACCIDENTAL RELEASE MEASURES:

**PRECAUTIONS TO PROTECT ENVIRONMENT:** Pick up small pieces carefully. Wet mop or vacuum. Avoid contact with skin or inhalation of spillage, dust or vapour.

### 7. HANDLING AND STORAGE:

**SPECIAL REQUIREMENTS:** None.

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

INGREDIENT NAME	CAS No.	STD.	LT EXP 8hrs	ST EXP 15min.
METALLIC LEAD	7439-92-1	MEL.	0.15 mg/m <sup>3</sup>	No std.

**VENTILATION:** When working with molten metal, provide adequate general and local exhaust ventilation.

**PROTECTIVE GLOVES:** Chemical resistant gloves required for prolonged or repeated contact.

**EYE PROTECTION:** Wear safety goggles to prevent any possibility of contact with molten material or repeated or prolonged contact with material in any other form.



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### EXPOSURE CONTROLS AND PERSONAL PROTECTION: Continued

**OTHER PROTECTION:** If working with molten metal indoors, use engineering controls to reduce air contamination to permissible exposure level. Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear dust masks in dusty areas.

**HYGIENIC WORK PRACTICES:** Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove non-impervious clothing that becomes contaminated.

### 9. PHYSICAL AND CHEMICAL PROPERTIES:

**APPEARANCE:** Solid. Metal or metallic.      **COLOUR:** Blue. Grey.      **SOLUBILITY DESCRIPTION:** Insoluble in ordinary solvents. Insoluble in water.

**MOL. WEIGHT (AT WT):** 207.19 **BOILING POINT** (°C, interval): ~1740 **MELT./FREEZ. POINT** (°C, interval): ~327

**DENSITY/SPECIFIC GRAVITY** (g/ml): 11.34 (TEMPERATURE (20° C): **VAPOUR PRESSURE:** 1.00 (TEMPERATURE 972° C):

### 10. STABILITY AND REACTIVITY:

**MATERIALS TO AVOID:** Ammonium Nitrate, Chlorine Trifluoride, Hydrogen Peroxide, Potassium, Sodium, Sodium Carbide, Zirconium Strong Oxidising Agents. Chemically active metals.

**HAZARDOUS DECOMP. PRODUCTS:** Very toxic gases/vapours/fumes of: Lead. Oxides of: Lead.

### 11. TOXICOLOGICAL INFORMATION:

**HEALTH WARNINGS:** This chemical can be hazardous when inhaled and/or touched. Known or suspected teratogen. Neurotoxin. Anaemia. Central and/or peripheral nervous system damage.

**ROUTE OF ENTRY:** Inhalation. Ingestion.

**TARGET ORGANS:** Blood. Central nervous system. Gastrointestinal tract. Kidneys. Respiratory system, lungs. Teeth

**MEDICAL SYMPTOMS:** Gastrointestinal symptoms, including upset stomach. Constipation. Metallic taste. Loss of appetite, anorexia. Peripheral neuropathy. Hypotension (low blood pressure). Convulsions, shock.

### 12. ECOLOGICAL INFORMATION:

No specific environmental hazards noted.

### 13. DISPOSAL CONSIDERATIONS:

**DISPOSAL METHODS:** Recover and reclaim or recycle, if practical. Metal may be returned to Calder Industrial Materials for recycling. Confirm disposal procedures with environmental engineer and local regulations. Treat the disposal of solids as hazardous waste. Dispose of in accordance with Local Authority requirements.

### 14. TRANSPORT INFORMATION:

**LABEL FOR CONVEYANCE:** NO TRANSPORT WARNING SIGN REQUIRED

### 15. REGULATORY INFORMATION:

**LABEL FOR SUPPLY:** NOT CLASSIFIED

**RISK PHRASES:** R33 Danger of cumulative effects.  
R20/22 Harmful by inhalation and if swallowed.

**SAFETY PHRASES:** S13 Keep away from food, drink and animal feeding stuffs.  
S20/21 When using do not eat, drink or smoke.

#### UK REGULATORY REFERENCES:

Health and Safety at Work Act 1974. The Control of Substances Hazardous to Health Regulations 2002.

Control of Lead at Work Regulations 2002, SI2002/2676. Chemicals (Hazard Information & Packaging for Supply) Regulations 2009.

#### APPROVED CODE OF PRACTICE:

Control of Lead at Work COP 2 1985

#### GUIDANCE NOTES:

CLAW REGS 2002. EH40/2005 Occupational Exposure Limits.



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### 16. OTHER INFORMATION:

**INFORMATION SOURCES:** Dangerous Properties of Industrial Chemicals, 6.edition, N. Sax, 1984. NIOSH/OSHA Pocket Guide to Chemical Hazards, 1978. Chemical Hazards of the Workplace, Proctor & Hughes, Lippincott, 1978 The Merck Index, 11. edition, 1989. Threshold Limit Values and Biological Exposure Indices for 198586. Chemical Safety Data Guide. Bureau of National Affairs, 1985

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