



# Material Safety Data Sheet

24-HOUR EMERGENCY CONTACT  
 (336) 650-7245/7257  
 CHEMTREC (800) 424-9300

## HMIS Hazard Rating

HEALTH	3
FLAMMABILITY	1
REACTIVITY	1

0 Minimal Hazard  
 1 Slight Hazard  
 2 Moderate Hazard  
 3 Serious Hazard  
 4 Severe Hazard

**PREPARED BY:** A.L. Csontos  
**MANUFACTURER:** Douglas Battery Manufacturing Company  
 Product Information (800) 368-4527

**Date Revised:** 1/05  
 500 Battery Drive, Winston-Salem, NC 27107  
 Internet Address [www.douglasbattery.com](http://www.douglasbattery.com)

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### SECTION 1 – IDENTITY

**Common Name:** LEAD PARTS      **Common Synonyms:** Lead, hard lead  
 (Posts, terminals, connectors)

**Chemical Name:** Lead, Metallic      **Chemical Family:** Metallic inorganic lead, alloyed lead

**Product Use:** Component of lead/acid batteries      **Formula:** Pb

**DOT Shipping Name:** NA

### SECTION 2 – HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (chemical & common name(s))	C.A.S.	Hazard Category	%	ACGIH TLV	OSHA PEL/TWA
Lead (Metallic)	7439-92-1	Acute/Chronic	22-28%	0.15 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>
Antimony	7440-36-0	Acute/Chronic	1-6%	0.50 mg/m <sup>3</sup>	0.50 mg/m <sup>3</sup>
Tin	7440-31-5	Acute/Chronic	0-1%	2.0 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>
Arsenic	7440-38-2	Acute/Chronic	.2-.3%	0.01 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>

This Product description or Trade name contains toxic chemicals subject to reporting requirements under Section 313 of Title III the "Superfund Amendments and Reauthorization Act" of 1986 and 40 CFR 372 and California Proposition 65.

### SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

**Boiling Point:** 3164° F      **Vapor Pressure:** NA      **Vapor Density:** NA      **Specific Gravity:** 11.35

**Melting Point:** 621.3°F @ 1 atm.

**Percent Volatile by Volume (%):** None

**Reactivity in Water:** None      **Solubility in Water:** Insoluble

**Appearance and Odor:** Silver – gray metal

**Physical State:** Solid      **PH:** NA

**Flash Point:** NA      **Flammable Limits in Air% by Volume:** Lower NA Upper NA      **Auto-Ignition Temperature:** NA

**Extinguisher Media:** Carbon Dioxide, Do not use water on fires where molten metal is present

**Special Fire Fighting Procedures:** Wear full body protective clothing, respirator, SCBA

**Unusual Fire and Explosion Hazards:** Fumes and dust from molten metal can produce respiratory irritation.

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## SECTION 4 – PHYSICAL HAZARDS

**Stability:** Stable; Avoid mixing molten metal with water.

**Incompatibility:**

(Materials to Avoid) Halogen gases, sodium, potassium, aluminum, metal sulfides, strong oxidizers, hydrogen peroxide, hydrogen sulfides, nitrogen compounds.

**Hazardous Decomposition Products:** Molten metal products; when heated to decomposition may emit toxic fumes of lead and arsenic.

**Hazardous Polymerization:** Will Not Occur

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## SECTION 5 – HEALTH HAZARDS

**Signs and Symptoms of Exposure**

1. Chronic: Elevated blood lead level. Tire easily, loss of appetite, nausea, irritability, metallic taste, insomnia. Toxic in nervous system, kidneys, and reproductive system.
2. Acute: Constipation, vomiting, blue line on gums, weak wrists or ankles, weight loss, yellowish skin.

**Medical Conditions Generally**

**Aggravated by Exposure:** Harmful effects of lead are increased for a person with dietary deficiencies in calcium, iron, and zinc.

**Routes of Entry:** Inhalation, Ingestion: Eyes, skin, and mouth.

**Chemical Listed as carcinogen**

**or Potential Carcinogen:** (Lead)

National Toxicology Yes   
Program No

I.A.R.C. Yes   
Monographs No

OSHA Yes   
No

EPA Yes   
CAG No

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## Emergency and First Aid Procedures

1. Inhalation: Remove from exposure, see physician.
  2. Eyes: Wash eyes with large amounts of running water for 15 minutes. Obtain medical attention.
  3. Skin: Flush area with running water. Remove contaminated clothing and obtain medical attention.
  4. Ingestion: See physician.
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## SECTION 6 – SPECIAL PROTECTION INFORMATION

**Respiratory Protection:** PAPR, Full face or half face mask respirator with HEPA cartridges

**Ventilation:** Local exhaust for melting or burning lead

**Protective Gloves:** Heat resistant gloves and arm coverings in molten lead areas

**Eye Protection:** Safety glasses with side shields or face shield

**Other Protective Equipment:** Full body clothing should be worn in lead or arsenic exposure areas and laundered after each use.

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## SECTION 7 – SPECIAL PRECAUTIONS AND SPILL / LEAK PROCEDURES

**Precautions to Be Taken:** Store lead in dry area with little air movement. Do not breathe dust. Monitor ambient air for work exposure, control exposure to OSHA PEL levels for workers by ventilation or approved respiratory protection. Wash hands, arms, and face thoroughly before eating, drinking, or smoking.

**Other Precautions:** Street clothing, food, drinks, cosmetics, and tobacco products should be stored in non-lead contaminated areas.

**Material Spill or Release:** Material should be vacuumed or wetted and swept up without creating dust. Do not dry sweep or use compressed air.

**Waste Disposal Methods:** Dispose of toxic substances and hazardous wastes in accordance with local, state, and federal regulation.