

Common Name: **LEAD SULFIDE**

Synonyms: Plumbous Sulfide; Galena

CAS No: 1314-87-0

Molecular Formula: PbS

RTK Substance No: 1113

Description: Silvery metallic, crystalline material or a black powder

### HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<p><b>3 - Health</b></p> <p><b>0 - Fire</b></p> <p><b>0 - Reactivity</b></p> <p><b>DOT#:</b> UN 3077</p> <p><b>ERG Guide #:</b> 171</p> <p><b>Hazard Class:</b> 9 (Miscellaneous Hazardous Material)</p>	<p>Extinguish fire using an agent suitable for type of surrounding fire. <b>Lead Sulfide</b> itself does not burn.</p> <p>DO NOT USE water jet, use water spray or fog.</p> <p>POISONOUS FUMES ARE PRODUCED IN FIRE, including <i>Lead Oxides</i> and <i>Sulfur Oxides</i>.</p> <p>CONTAINERS MAY EXPLODE IN FIRE.</p> <p>Use water spray to keep fire-exposed containers cool.</p>	<p><b>Lead Sulfide</b> is incompatible with HYDROGEN PEROXIDE and IODINE CHLORIDE.</p>

#### SPILL/LEAKS

**Isolation Distance:** 25 to 50 meters (80 to 160 feet)

Moisten spilled material first or use a HEPA-filter vacuum for clean-up.

Toxic to aquatic organisms.

Hazardous to the environment and persists in the environment.

#### PHYSICAL PROPERTIES

**Odor Threshold:** No information

**Flash Point:** Noncombustible

**Vapor Pressure:** 1 mm Hg at 1,565°F (852°C)

**Specific Gravity:** 7.5 (air = 1)

**Boiling Point:** 2,338°F (1,281°C)

**Water Solubility:** Insoluble

**Melting Point:** 2,037°F (1,114°C)

#### EXPOSURE LIMITS

**OSHA:** 0.05 mg/m<sup>3</sup>, 8-hr TWA (as *Lead*)

**NIOSH:** 0.05 mg/m<sup>3</sup>, 10-hr TWA (as *Lead*)

**ACGIH:** 0.05 mg/m<sup>3</sup>, 8-hr TWA (as *Lead*)

**IDLH LEVEL:** 100 mg/m<sup>3</sup>

#### PROTECTIVE EQUIPMENT

**Gloves:** Nitrile, Latex, Rubber

**Coveralls:** DuPont Tyvek® and Tychem® Polycoat, QC, CPF-1, SL and CPF-2

**Boots:**

**Respirator:** Butyl, Neoprene

<0.5 mg/m<sup>3</sup> - N100

>0.5 mg/m<sup>3</sup> - full facepiece APR with High Efficiency filters

>50 mg/m<sup>3</sup> but ≤100 mg/m<sup>3</sup> - Supplied Air

#### HEALTH EFFECTS

**Eyes:** No information

**Skin:** No information

**Acute:** Headache, irritability, upset stomach, and weakness

**Chronic:** *Inorganic Lead* compounds may cause lung, brain, stomach and kidney cancer in humans.

Metallic taste, colic, and muscle cramps

Damage to the nervous system

#### FIRST AID AND DECONTAMINATION

**Remove** the person from exposure.

**Flush** eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.

**Remove** contaminated clothing and wash contaminated skin with soap and water.

**Transfer** to a medical facility.