Material Safety Data Sheet
Lead oxide, red MSDS

Section 1: Chemical Product and Company Identification

Product Name: Lead oxide, red
Catalog Codes: SLL1279
CAS#: 1314-41-6
RTECS: OG5425000
TSCA: TSCA 8(b) inventory: Lead oxide, red
CI#: Not available.
Synonym: Lead tetroxide
Chemical Name: Lead tetroxide
Chemical Formula: Pb3O4

Contact Information:
Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396
US Sales: 1-800-901-7247
International Sales: 1-281-441-4400
Order Online: ScienceLab.com
CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300
International CHEMTREC, call: 1-703-527-3887
For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead oxide, red</td>
<td>1314-41-6</td>
<td>100</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients: Lead oxide, red LD50: Not available. LC50: Not available.

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of eye contact (irritant). Slightly hazardous in case of inhalation (lung irritant). Non-irritant for skin. Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Classified + (PROVEN) by OSHA+ (PROVEN) by NIOSH. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4: First Aid Measures

Eye Contact: Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.
Skin Contact: No known effect on skin contact, rinse with water for a few minutes.
Serious Skin Contact: Not available.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:
Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.
Auto-Ignition Temperature: Not applicable.
Flash Points: Not applicable.
Flammable Limits: Not applicable.
Products of Combustion: Not available.
Fire Hazards in Presence of Various Substances: Not applicable.
Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions: Not applicable.
Special Remarks on Fire Hazards: Not available.
Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:
Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep locked up Keep away from heat. Keep away from sources of ignition. Keep away from combustible material Do not breathe dust. Avoid contact with eyes Wear suitable protective clothing If you feel unwell, seek medical attention and show the label when possible.

Storage: Oxidizing materials should be stored in a separate safety storage cabinet or room.

Section 8: Exposure Controls/Personal Protection
Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
U.S.A: TWA: 0.05 (mg/m3) from ACGIH [1996] Consult local authorities for acceptable exposure limits.

<table>
<thead>
<tr>
<th>Section 9: Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state and appearance:</strong> Solid.</td>
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<tr>
<td><strong>Odor:</strong> Not available.</td>
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<tr>
<td><strong>Taste:</strong> Not available.</td>
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<tr>
<td><strong>Molecular Weight:</strong> 685.57 g/mole</td>
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<tr>
<td><strong>Color:</strong> Bright red powder</td>
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<tr>
<td><strong>pH (1% soln/water):</strong> Not applicable.</td>
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<tr>
<td><strong>Boiling Point:</strong> Not available.</td>
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<tr>
<td><strong>Melting Point:</strong> Not available.</td>
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<tr>
<td><strong>Critical Temperature:</strong> Not available.</td>
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<tr>
<td><strong>Specific Gravity:</strong> 9.1 (Water = 1)</td>
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<tr>
<td><strong>Vapor Pressure:</strong> Not applicable.</td>
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<tr>
<td><strong>Vapor Density:</strong> Not available.</td>
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<td><strong>Volutility:</strong> Not available.</td>
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<tr>
<td><strong>Odor Threshold:</strong> Not available.</td>
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<tr>
<td><strong>Water/Oil Dist. Coeff.:</strong> Not available.</td>
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<td><strong>Ionicity (in Water):</strong> Not available.</td>
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<tr>
<td><strong>Dispersion Properties:</strong> Not available.</td>
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<tr>
<td><strong>Solubility:</strong> Insoluble in cold water.</td>
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<thead>
<tr>
<th>Section 10: Stability and Reactivity Data</th>
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<tr>
<td><strong>Stability:</strong> The product is stable.</td>
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<td><strong>Instability Temperature:</strong> Not available.</td>
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<td><strong>Conditions of Instability:</strong> Not available.</td>
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<tr>
<td><strong>Incompatibility with various substances:</strong> Slightly reactive to reactive with reducing agents, combustible materials.</td>
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<tr>
<td><strong>Corrosivity:</strong> Non-corrosive in presence of glass.</td>
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</table>
Special Remarks on Reactivity: Not available.
Special Remarks on Corrosivity: Not available.
Polymerization: No.

Section 11: Toxicological Information

Routes of Entry: Eye contact. Inhalation. Ingestion.

Toxicity to Animals:
LD50: Not available. LC50: Not available.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified + (PROVEN) by OSHA+ (PROVEN) by NIOSH.

Other Toxic Effects on Humans:
Slightly hazardous in case of inhalation (lung irritant). Non-irritant for skin.

Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: Not available.
Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification: CLASS 5.1: Oxidizing material.

Identification: : Oxidizing Solid, n.o.s. (Lead Tetroxide) : UN1479 PG: III

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Lead oxide, red California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Lead oxide, red California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (male) which would require a warning under
the statute: Lead oxide, red California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Lead oxide, red California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Lead oxide, red Massachusetts RTK: Lead oxide, red TSCA 8(b) inventory: Lead oxide, red SARA 313 toxic chemical notification and release reporting: Lead oxide, red CERCLA: Hazardous substances.: Lead oxide, red


Other Classifications:

WHMIS (Canada): CLASS C: Oxidizing material.

DSCL (EEC):
R36- Irritating to eyes. R45- May cause cancer.

HMIS (U.S.A.):

- Health Hazard: 2
- Fire Hazard: 0
- Reactivity: 0
- Personal Protection: E

National Fire Protection Association (U.S.A.):

- Health: 2
- Flammability: 0
- Reactivity: 0
- Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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