

# Material Safety Data Sheet / Safety Data sheet

## Lead Tetroxide

### Section 1: Chemical Product Identifier and Synonyms

Product Name: Lead Tetroxide

UN Number: 3288

CAS Number: 1314-41-6

Synonym: Red Lead oxide; Lead(II,IV) Oxide; Minium; Read Lead)

Chemical Formula: Pb<sub>3</sub>O<sub>4</sub>

### Section 2: Composition and Information on Ingredients

#### Composition

Name	CAS Number:	% By Weight
Lead Tetroxide	1314-41-6	>95

**Toxicology Data On Ingredients:** Lead Tetroxide LD50: Not Available. LC50: Not Available

### Section 3: Hazards Identification

#### Potential Acute Health Effects:

Slightly hazardous in case of eye contact (irritant), of ingestion, of inhalation.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact during pregnancy/while nursing.

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

#### Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. 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:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the

case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Skin Contact:**

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

**Inhalation:**

Move to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

**Ingestion:**

Do not induce vomiting. Call a physician or Poison Control Center immediately.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** Not available.

**Auto-Ignition Temperature:** Not available.

**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:** Not available.

**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:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## Section 6: Accidental Release Measures

**Small Spill:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

**Large Spill:**

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. Should not be released into the environment.

## Section 7: Handling and Storage

### **Precautions:**

Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Avoid raising dust. Keep away from naked flames/heat. Observe strict hygiene. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

### **Storage:**

Keep only in the original container in a cool, well ventilated place away from: incompatible materials. Keep container closed when not in use.

## 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:**

Safety glasses. Gloves. Protective clothing. Dust production: dust mask with filter type P3.

### **Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

### **Exposure Limits:**

Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Solid. (Powdered solid.)

**Odour:** Odourless.

**Taste:** Not available.

**Molecular Weight:** 685.57 g/mole

**Colour:** Orange

**pH (1% soln/water):** 10.8 @ 20°C 67.3 mg/L

**Boiling Point:** Not applicable.

**Melting Point:** 500 - 530 °C / 932 - 986 °F

**Critical Temperature:** Not available.

**Specific Gravity:** 8.32 - 9.16 (Water = 1)

**Vapour Pressure:** 1 mmHg at 943 °C

**Vapour Density:** Not available.

**Volatility:** Not available.

**Odour Threshold:** Not available.

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.

**Dispersion Properties:** Not available.

**Solubility:** Slightly soluble.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable under normal conditions.

**Instability Temperature:** Not available.

**Conditions of Instability:** Direct sunlight. Extremely high temperatures and excess heat.

**Incompatibility with various substances:** Strong oxidizing agents, Strong reducing agents, Powdered metals

**Corrosivity:** Not available.

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Does not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:** (LD50): Not available. LC50: Not available.

**Chronic Effects on Humans:** Not available.

**Other Toxic Effects on Humans:** Slightly hazardous in case of ingestion, of inhalation. May cause harm to breastfed babies.

**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:** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

**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 products of degradation are as toxic as the original product.

**Special Remarks on the Products of Biodegradation:** Not available.

### Section 13: Disposal Information

**Waste Disposal:** Dispose of in accordance with local regulations

### Section 14: Transport Information

**DOT Classification:** CLASS 6.1: Poisonous material.

**Identification:** Lead Tetroxide (Toxic Solid, Inorganic N.O.S.) UN Number: UN3288 PG: III

**Special Provisions for Transport:** Not available.

### Section 15: Regulatory Information

**Regulations:** Labelling according to Regulation (EC) No 1272/2008.

### Section 16: Other Information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials. The author will not be held liable for any damage or injury caused by this product and does not obviate the requirement for end users to carry out their own workplace and specific use risk assessment.

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