

**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name	Lead (II) chromate
CAS #	7758-97-6
Manufacturer	Sentury Reagents, Inc. 2515 Commerce Dr. Rock Hill, SC 29730
Telephone	803-327-6880
Fax	803-327-3872
Emergency Phone #	
International Phone #	PERS 800-633-8253
Account	011-801-629-0667 10613

**2. HAZARDS IDENTIFICATION****OSHA Hazards**

Carcinogen, Target Organ Effect, Teratogen

**Target Organs**

Lungs, Blood, Kidney, Nerves., Female reproductive system., Male reproductive system.

**GHS Classification**

Carcinogenicity (Category 1A)

Reproductive toxicity (Category 1A)

Specific target organ toxicity - repeated exposure (Category 2)

Acute aquatic toxicity (Category 1)

Chronic aquatic toxicity (Category 2)

**GH3 Label elements, including precautionary statements**

Pictogram



Signal word DANGER

Hazard statement(s)

H350

May cause cancer.

H360

May damage fertility or the unborn child.

H373

May cause damage to organs through prolonged or repeated exposure.

H400

Very toxic to aquatic life.

H411

Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P201

Obtain special instructions before use.

P202

Do not handle until all safety regulations have been read and understood.

P273

Avoid release to the environment.

P280

Wear protective clothing, gloves, eye &amp; face protection and respiratory protection.

P308 + P313

IF exposed or concerned: Get medical advice/ attention.

P501

Dispose of in accordance with all applicable regulations.

<b>HMIS Classification</b>		<b>NFPA Rating</b>	
<b>Health hazard:</b>	3	<b>Health hazard:</b>	2
<b>Flammability:</b>	0	<b>Fire:</b>	0
<b>Physical hazards:</b>	3	<b>Reactivity hazard:</b>	0
<b>Personal protection:</b>	E		

**Potential Health Effects**

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	
<b>Eyes</b>	May cause eye irritation.
<b>Ingestion</b>	May be harmful if swallowed.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula	: CrO <sub>4</sub> Pb
Molecular Weight	: 323.19 g/mol

Component	Concentration
<b>Lead chromate</b> Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)	
CAS-No. 7758-97-6 EC-No. 231-846-0 Index-No. 082-004-00-2	≥92%

**4. FIRST AID MEASURES**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**5. FIRE-FIGHTING MEASURES**

**Conditions of flammability**

Not flammable or combustible.

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Special protective equipment for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Lead oxides, Chromium oxides

**Further information**

The product itself does not burn.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Lead chromate	7758-97-6	TWA	0.012 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
Remarks	Male reproductive damage Teratogenic effects Vasoconstriction Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Suspected human carcinogen			
		TWA	0.05 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
	Male reproductive damage Teratogenic effects Vasoconstriction Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Suspected human carcinogen			
		TWA	0.0050 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		CEIL	0.0010 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z2
		CEIL	0.1 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		TWA	0.075 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

**Personal protective equipment**

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	powder
Colour	orange yellow

### Safety data

pH	no data available
Melting point/ Freezing point	844° C
Boiling point	no data available
Flash point	not applicable
Ignition temperature	no data available
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density	6.300 g/cm <sup>3</sup>
Water solubility	Negligible
Partition coefficient: n-octanol/ Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available
Evaporation rate	no data available

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## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

no data available

### Materials to avoid

Organic materials, Powdered metals

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Lead oxides, Chromium oxides Other decomposition products - no data available

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Oral LD50

LD50 Oral - mouse - > 12,000 mg/kg

#### Inhalation LC50

no data available

#### Dermal LD50

no data available

#### Other information on acute toxicity

no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### **Carcinogenicity**

Carcinogenicity - rat - Intramuscular

Tumorigenic:Neoplastic by RTECS criteria. Kidney, Ureter, Bladder:Kidney tumors. Tumorigenic:Tumors at site or application.

Carcinogenicity - rat - Subcutaneous

Tumorigenic:Neoplastic by RTECS criteria. Tumorigenic:Tumors at site or application.

Carcinogenicity - rat - Subcutaneous

Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Tumorigenic:Tumors at site or application. Human carcinogen.

IARC: 1 - Group 1: Carcinogenic to humans (Lead chromate)

2A - Group 2A: Probably carcinogenic to humans. Re-evaluation of inorganic lead compounds, IARC Monograph (Vol. 87) (February 2004) (Lead chromate)

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1 - Group 1: Carcinogenic to humans (Lead chromate)

2A - Group 2A: Probably carcinogenic to humans (Lead chromate)

NTP: Known to be human carcinogen (Lead chromate)

Reasonably anticipated to be a human carcinogen (Lead chromate) Known to be human carcinogen (Lead chromate)

Reasonably anticipated to be a human carcinogen. The reference note has been added by TD based on the background information of the NTP. (Lead chromate)

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OSHA: 1910.1025 (Lead chromate)

1910.1026 (Lead chromate)

### **Reproductive toxicity**

no data available

### **Teratogenicity**

Known human reproductive toxicant

### **Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

### **Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

May cause damage to organs through prolonged or repeated exposure. no data available

### **Aspiration hazard**

no data available

### **Potential health effects**

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.  
**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.  
**Eyes** May cause eye irritation.

### **Signs and Symptoms of Exposure**

Lead salts have been reported to cross the placenta and to induce embryo- and fetotoxicity. They also have teratogenic effect in some animal species. No teratogenic effects have been reported with exposure to organometallic lead compounds. Adverse effects of lead on human reproduction, embryonic and fetal development, and postnatal (e.g., mental) development have been reported. Excessive exposure can affect blood, nervous, and digestive systems. The synthesis of hemoglobin is inhibited and results in anemia. If left untreated, neuromuscular dysfunction, possible paralysis, and encephalopathy can result. Additional symptoms of overexposure include: joint and muscle pain, weakness of the extensor muscles (frequently the hand and wrist), headache, dizziness, abdominal pain, diarrhea, constipation, nausea, vomiting, blue line on the gums, insomnia, and metallic taste. High body levels produce increased cerebrospinal pressure, brain damage, and stupor leading to coma and often death. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Synergistic effects**

no data available

**Additional Information**

RTECS: GB2975000

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**12. ECOLOGICAL INFORMATION**

**Toxicity** no data available

**Persistence and degradability** no data available

**Bioaccumulative potential** no data available

**Mobility in soil** no data available

**PBT and vPvB assessment** no data available

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

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**13. DISPOSAL CONSIDERATIONS**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION**

**DOT (US)** UN3288 Toxic Solid, Inorganic, n.o.s., (Lead Chromate), Class 6.1, Packing Group III

**IMDG** UN3288 Toxic Solid, Inorganic, n.o.s., (Lead Chromate), Class 6.1, Packing Group III

**IATA** UN3288 Toxic Solid, Inorganic, n.o.s., (Lead Chromate), Class 6.1, Packing Group III

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**15. REGULATORY INFORMATION**

**OSHA Hazards**

Carcinogen, Target Organ Effect, Teratogen

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:

	<b>CAS-No.</b>	<b>Revision Date</b>
Lead Chromate	7758-97-6	1993-04-24

**SARA 311/312 Hazards**

Chronic Health Hazard

**Massachusetts Right To Know Components**

Lead Chromate	7758-97-6	1993-04-24
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**Pennsylvania Right To Know Components**

Lead Chromate	7758-97-6	1993-04-24
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**New Jersey Right To Know Components**

Lead Chromate	7758-97-6	1993-04-24
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**California Prop. 65 Components**

WARNING! This product contains a chemical known to the State of California to cause cancer.	7758-97-6	1993-04-24
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**California Prop. 65 Components**

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.	7758-97-6	1993-04-24
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**16. OTHER INFORMATION**

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sentury Reagents, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product.