



Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810

Number:  
Issue Date

PBLM-4490  
03/30/12

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## MATERIAL SAFETY DATA SHEET

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### 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description LEAD-204 CARBONATE (204PB)

Cambridge Isotope Laboratories, Inc.  
50 Frontage Rd  
ANDOVER, MA 01810  
USA

E-mail [cilsales@isotope.com](mailto:cilsales@isotope.com)  
Web Site [www.isotope.com](http://www.isotope.com)

#### Phone Numbers

Emergency Contact Chemtrec  
Emergency Phone 1-800-424-9300 (24 hours)  
  
Customer Service 1-800-322-1174 (8:30-5:30 EST)  
Phone  
Transportation 1-202-483-7616 (24 hours)

### 2 HAZARDS IDENTIFICATION

#### OSHA Hazards

Carcinogen, Target Organ Effect, Toxic by inhalation, Toxic by ingestion  
Reproductive hazard

#### Target Organs

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

#### GHS Classification

Acute toxicity, Oral (Category 4)  
Acute toxicity, Inhalation (Category 4)  
Reproductive toxicity (Category 1A)  
Specific Target Organ Toxicity - Repeated exposure (Category 2)  
Acute aquatic toxicity (Category 1)  
Chronic aquatic toxicity (Category 1)

#### GHS Label Information

Signal Word Danger

#### Hazards Identification

Health hazard



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Exclamation mark  
Environment

### Hazard Statement(s)

Harmful if swallowed or if inhaled.  
May damage fertility or the unborn child.  
May cause damage to organs through prolonged or repeated exposure.  
Very toxic to aquatic life with long lasting effects.

### Precautionary Statement(s)

Obtain special instructions before use.  
Avoid release to the environment.  
IF exposed or concerned: Get medical advice/attention.  
Dispose of contents/container to an approved waste disposal plant.

### HMIS Ratings

Chronic Health	*
Physical	0
Flammability	0
Health	2

### NFPA Codes

Fire	0
Health	2
Reactivity	0

### Potential Health Effects

Eyes	Contact may cause eye irritation.
Ingestion	Toxic if swallowed.
Inhalation	Toxic if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.

## 3 COMPOSITION / INFORMATION ON INGREDIENTS

### Composition / Information on Ingredients

Chemical Formula	PbCO <sub>3</sub>
Molecular Weight	264
CAS No.	598-63-0 (unlabeled)
EC No.	209-943-4
Index No.	082-001-00-6

## 4 FIRST AID MEASURES

### First Aid Measures

Eyes	Flush eyes with water as a precaution.
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Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Inhalation	If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin	Wash with soap and plenty of water. Consult a physician.
Additional Information	Move out of dangerous area. Consult a physician and show this safety data sheet.

### 5 FIRE FIGHTING MEASURE

#### Fire Fighting Measures

Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
Fire Fighting Equipment	Wear self contained breathing apparatus for fire fighting if necessary.

### 6 ACCIDENTAL RELEASE MEASURES

#### Accidental Release Measures

Personal Precautions	Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleanup	Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

### 7 HANDLING AND STORAGE

#### Precautions for Safe Handling

Handling	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
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#### Conditions for Safe Storage



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Storage Store at room temperature away from light and moisture.

### 8 EXPOSURE CONTROL / PERSONAL PROTECTION

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

CHEMICAL NAME

LEAD-204 CARBONATE

TWA

OSHA PEL

ACGIH TLV

0.05 mg/M<sup>3</sup>

Personal Protection

Eyes - Face

Wear safety glasses with side shields (or goggles) and a face shield.

Skin

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory

When appropriate, use NIOSH/CEN approved respirator.

Protective Clothing

Wear suitable protective clothing and gloves.

Work Hygienic Practices

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

### 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties (Unlabeled Compound)

Form

Powder

Color

White

Odor

No data available

Odor Threshold

No data available

pH

No data available

Melting Point

400 °C (752 °F)

Boiling Point

No data available

Flashpoint

Not applicable

Evaporation Rate

No data available

Lower Explosion Limit

No data available

Upper Explosion Limit

No data available

Vapor Pressure

No data available

Vapor Density

No data available

Solubility in Water

No data available



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Partition Coefficient No data available  
Auto Ignition Temperature No data available

### 10 STABILITY AND REACTIVITY

#### Stability and Reactivity

Chemical Stability Stable if stored under recommended conditions.

Possibility of Hazardous Reactions Not available

Conditions to Avoid Not available

Hazardous decomposition products Formed under fire conditions: Cobalt/cobalt oxides, Lead oxides

Materials to avoid Strong acids, Strong oxidizing agents

### 11 TOXICOLOGICAL INFORMATION

#### Acute Toxicity

Serious Damage/Eye Irritation No data available

Skin Corrosion/Irritation No data available

Inhalation No data available

Respiratory or Skin Sensitization Not available

Germ Cell Mutagenicity Not available

IARC 2A - Group 2A: Probably carcinogenic to humans.  
NTP Reasonably anticipated to be a human carcinogen.  
OSHA No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.



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Reproductive Toxicity      Known human reproductive toxicant.  
May cause reproductive disorders.

### Specific Target Organ Toxicity

Single Exposure      No data available  
Repeated Exposure    May cause damage to organs through prolonged or repeated exposure

### Signs and Symptoms of Exposure

Embryo- and Feto- mortality  
Anemia  
Neuromuscular dysfunction  
Paralysis  
Encephalopathy  
Joint and muscle pain  
Constipation  
Nausea  
Vomiting  
Blue line on the gums  
Insomnia  
Metallic taste  
Stupor  
Cerebralspinal pressure  
Brain damage  
Coma  
Death

## 12 ECOLOGICAL INFORMATION

### Toxicity

Toxicity to Fish      Pimephales promelas (fathead minnow) > 5.00 mg/l - 96 h  
LC50

Persistence and Degradability      Not available

Bioaccumulative Potential      Not available

Mobility in Soil      Not available

PBT and vPvB Assessment      Not available

Other Adverse Effects      An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Very toxic to aquatic life with long lasting effects.



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### 13 DISPOSAL CONSIDERATIONS

#### Disposal Considerations

Product Disposal Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

### 14 TRANSPORT INFORMATION

#### Transportation Information-DOT/IATA/IMDG

Special Shipping Notes	DOT: Not dangerous goods
UN Number	3077
Prop. Ship. Name	Environmentally Hazardous Substance, Solid, n.o.s., (Lead(II) carbonate)
Hazard Class	9
Packing Group	III
Marine Pollutant	Yes

### 15 REGULATORY INFORMATION

#### Regulatory Information

Carcinogen, Target Organ Effect, Toxic by inhalation, Toxic by ingestion  
Reproductive hazard

#### SARA

Sara 302 Component	No chemicals in this material are subject to the reporting requirements.
Sara 313 Component	No chemicals in this material are subject to the reporting requirements.

#### SARA 311/312 Hazards

Acute (Y/N)	Y
Chronic (Y/N)	Y

#### STATE REGULATIONS

Massachusetts Right to Know	Yes
Pennsylvania Right	Yes



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to Know  
New Jersey Right to Know Yes

California Proposition 65 WARNING! This product contains a chemical known by the state of California to cause cancer.

Canada

DSL Status All components are on the Canadian DSL list.  
EU Hazard Toxic. Dangerous for environment.

### Safety Statements

Avoid exposure - obtain special instructions before use.  
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
Avoid release to the environment. Refer to special instructions/safety data sheet. This material and its container must be disposed of as hazardous waste.

### Risk Statements

May cause harm to the unborn child.  
Harmful by inhalation and if swallowed.  
Danger of cumulative effects.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Possible risk of impaired fertility.

## 16 OTHER INFORMATION

Additional MSDS Information This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Approved On 03/30/12  
Version Number 2