



## LEAD MONOSILICATE

Safety Data Sheet PBL6300

Date of issue: 01/05/2017

Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product name : LEAD MONOSILICATE  
 Product code : PBL6300  
 Product form : Substance  
 Physical state : Solid  
 Formula : O3PbSi  
 Synonyms : PLUMBOUS SILICATE  
 LEAD METASILICATE  
 Chemical family : METAL COMPOUND

#### 1.2. Recommended use and restrictions on use

Recommended use : Chemical intermediate

#### 1.3. Supplier

##### GELEST, INC.

11 East Steel Road  
 Morrisville, PA 19067

##### USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

[info@gelest.com](mailto:info@gelest.com) - [www.gelest.com](http://www.gelest.com)

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Specific target organ toxicity (single exposure) Category 3 H335 May cause respiratory irritation

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H335 - May cause respiratory irritation

Precautionary statements (GHS US) : P261 - Avoid breathing dust.  
 P271 - Use only outdoors or in a well-ventilated area.  
 P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
 P312 - Call a doctor if you feel unwell  
 P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
 P405 - Store locked up.  
 P501 - Dispose of contents/container to licensed waste disposal facility.

#### 2.3. Hazards not otherwise classified (HNOC)

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Substance type : Mono-constituent  
 Name : LEAD MONOSILICATE  
 CAS-No. : 10099-76-0

| Name              | Product identifier   | %        | GHS-US classification |
|-------------------|----------------------|----------|-----------------------|
| Lead monosilicate | (CAS-No.) 10099-76-0 | 90 - 100 | STOT SE 3, H335       |

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Full text of hazard classes and H-statements : see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures general            | : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label. |
| First-aid measures after inhalation   | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.  |
| First-aid measures after skin contact | : Wash with plenty of soap and water. Get medical advice/attention.  |
| First-aid measures after eye contact  | : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.  |
| First-aid measures after ingestion    | : Never give anything by mouth to an unconscious person. Get medical advice/attention.   |

### 4.2. Most important symptoms and effects (acute and delayed)

|                                     |   |
|-------------------------------------|---|
| Symptoms/effects after inhalation   | : May cause respiratory irritation.   |
| Symptoms/effects after skin contact | : May cause skin irritation.  |
| Symptoms/effects after eye contact  | : May cause eye irritation.   |
| Symptoms/effects after ingestion    | : May be harmful if swallowed.  |
| Chronic symptoms                    | : Exposure to dust or fumes of organic lead compounds is known to cause toxic effects. Lead is a cumulative poison. |

### 4.3. Immediate medical attention and special treatment, if necessary

Physician note: Diagnostic mobilization of lead with calcium EDTA may be useful in questionable cases.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

|                                |  |
|--------------------------------|--|
| Suitable extinguishing media   | : Water spray. Foam. Carbon dioxide. Dry chemical. |
| Unsuitable extinguishing media | : None known.                                      |

### 5.2. Specific hazards arising from the chemical

|             |   |
|-------------|---|
| Fire hazard | : Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame. |
|-------------|---|

### 5.3. Special protective equipment and precautions for fire-fighters

|                                |  |
|--------------------------------|--|
| Firefighting instructions      | : Exercise caution when fighting any chemical fire. Use water spray to cool exposed surfaces.  |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust. |

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

|                      |  |
|----------------------|--|
| Protective equipment | : Wear protective equipment as described in Section 8. |
| Emergency procedures | : Evacuate unnecessary personnel.                      |

#### 6.1.2. For emergency responders

|                      |  |
|----------------------|--|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection". |
|----------------------|--|

### 6.2. Environmental precautions

Notify authorities if product enters sewers or public waters. Prevent entry to sewers and public waters.

### 6.3. Methods and material for containment and cleaning up

|                         |  |
|-------------------------|--|
| For containment         | : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. |
| Methods for cleaning up | : Sweep or shovel spills into appropriate container for disposal.                                    |

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

|                               |  |
|-------------------------------|--|
| Precautions for safe handling | : Avoid contact with skin and eyes. Do not breathe dust. Avoid dust formation. Use only outdoors or in a well-ventilated area. |
|-------------------------------|--|

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Hygiene measures : Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store locked up.  
Storage area : Store in a well-ventilated place. Store away from heat.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| Lead monosilicate (10099-76-0) |                                     |                                |
|--------------------------------|-------------------------------------|--------------------------------|
| ACGIH                          | ACGIH TWA (mg/m <sup>3</sup> )      | 0.15 mg/m <sup>3</sup> as lead |
| OSHA                           | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 0.05 mg/m <sup>3</sup> as lead |

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Provide local exhaust or general room ventilation.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### Hand protection:

Neoprene or nitrile rubber gloves

#### Eye protection:

Chemical goggles. Contact lenses should not be worn

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified dust and mist (orange cartridge) respirator.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Solid  
Appearance : Powder.  
Molecular mass : 283.28 g/mol  
Color : White.  
Odor : Odorless.  
Odor threshold : No data available  
Refractive index : 2.01  
pH : No data available  
Relative evaporation rate (butyl acetate=1) : No data available  
Melting point : 700 - 730 °C  
Freezing point : No data available  
Boiling point : No data available  
Flash point : No data available  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : Not flammable  
Vapor pressure : No data available  
Relative vapor density at 20 °C : No data available  
Relative density : 6.5  
% Volatiles : < 1 %  
Solubility : Insoluble in water.  
Organic solvent: Soluble: dil HCl  
Log Pow : No data available  
Log Kow : No data available

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|                      |                     |
|----------------------|---------------------|
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic   | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |
| Explosion limits     | : No data available |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Lead oxide fumes. Organic acid vapors.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|  |  |
|--|--|
| Acute toxicity                                     | : Not classified   |
| Skin corrosion/irritation                          | : Not classified   |
| Serious eye damage/irritation                      | : Not classified   |
| Respiratory or skin sensitization                  | : Not classified   |
| Germ cell mutagenicity                             | : Not classified   |
| Carcinogenicity                                    | : Not classified   |
|  | None of the components in this product at concentrations >0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen. |
| Reproductive toxicity                              | : Not classified   |
| Specific target organ toxicity – single exposure   | : May cause respiratory irritation.  |
| Specific target organ toxicity – repeated exposure | : Not classified   |
| Aspiration hazard                                  | : Not classified   |
| Symptoms/effects after inhalation                  | : May cause respiratory irritation.  |
| Symptoms/effects after skin contact                | : May cause skin irritation.   |
| Symptoms/effects after eye contact                 | : May cause eye irritation.  |
| Symptoms/effects after ingestion                   | : May be harmful if swallowed.   |
| Chronic symptoms                                   | : Exposure to dust or fumes of organic lead compounds is known to cause toxic effects. Lead is a cumulative poison.    |
| Reason for classification                          | : Expert judgment  |

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

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### 12.5. Other adverse effects

Other adverse effects : This substance may be hazardous to the environment.  
Effect on the ozone layer : No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Sewage disposal recommendations : Do not dispose of waste into sewer.  
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

### 14.1. UN number

Not regulated for transport.

### 14.2. UN proper shipping name

Not applicable

### 14.3. Additional information

Other information : No supplementary information available.

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Lead monosilicate (10099-76-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

#### Lead monosilicate (10099-76-0)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification : Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

#### EU-Regulations

#### Lead monosilicate (10099-76-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### National regulations

#### Lead monosilicate (10099-76-0)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on the Korean ECL (Existing Chemicals List)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Japanese Poisonous and Deleterious Substances Control Law  
Japanese Pollutant Release and Transfer Register Law (PRTR Law)

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

Full text of H-phrases::

H335

May cause respiratory irritation

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### Abbreviations and acronyms

: Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor.

### Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur  
Flammability : 0 Minimal Hazard - Materials that will not burn  
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Lead and its compounds are on the Community Right to Know List. Prepared by safety and environmental affairs.

Date of issue: 01/05/2017      Version: 1.0

SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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