Conforms to ANSI Z400.5-2004 Standard (United States, Canada, Mexico).

Material Safety Data Sheet
Precipitated Silica

1. Product and company identification

<table>
<thead>
<tr>
<th>Product name</th>
<th>Precipitated Silica</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material uses</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
| Supplier/Manufacturer | InterAtlas Chemical Inc.  
63 Church Street, Suite 403  
St. Catharines, ON CANADA L2R 3C4  
Tel. 905.684.9991  
Fax. 905.684.4504 |
| Validation date | 06/20/2008 |
| Responsible name | Atrion Regulatory Services, Inc. |
| In case of emergency | CHEMTREC, U.S. : +1-800-424-9300  
International: +1-703-527-3887 |

2. Hazards identification

Physical state : Solid.
OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Emergency overview : CAUTION!
MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
Contact may cause eye irritation. May cause skin irritation. Avoid contact with eyes, skin and clothing. May cause respiratory irritation. Target organs

Routes of entry : Dermal contact. Eye contact. Inhalation.
Potential acute health effects

Inhalation : May cause respiratory tract irritation.
Ingestion : No known significant effects or critical hazards.
Skin : May cause skin irritation.
Eyes : May cause eye irritation.

Potential chronic health effects
CARCINOGENIC EFFECTS: Classified 3 (Not classifiable for humans.) by IARC [Precipitated silica].
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.

Target organs : May cause damage to the following organs: lungs, skin, eyes.
Medical conditions aggravated by over-exposure : None known.

See toxicological information (section 11)

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precipitated silica</td>
<td>112926-00-8</td>
<td>60 - 100</td>
</tr>
</tbody>
</table>

Date of issue : 06/20/2008
## 3. Composition/information on ingredients

### Canada

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precipitated silica</td>
<td>112926-00-8</td>
<td>60 - 100</td>
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### Mexico

<table>
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<th>Name</th>
<th>UN number</th>
<th>IDLH</th>
<th>H</th>
<th>F</th>
<th>R</th>
<th>Special</th>
<th>CAS number</th>
<th>%</th>
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<tbody>
<tr>
<td>Precipitated silica</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>112926-00-8</td>
<td>60 - 100</td>
</tr>
</tbody>
</table>

## 4. First aid measures

**Eye contact**: Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.

**Skin contact**: Wash with soap and water. Get medical attention if symptoms occur.

**Inhalation**: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.

**Ingestion**: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training.

**Notes to physician**: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## 5. Fire-fighting measures

**Flammability of the product**: Non-flammable.

**Extinguishing media**

- **Suitable**: Use an extinguishing agent suitable for the surrounding fire.
- **Not suitable**: None known.

**Hazardous thermal decomposition products**: Decomposition products may include the following materials: metal oxide/oxides

**Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

**Personal precautions**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

**Environmental precautions**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods for cleaning up**

- **Small spill**: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

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6. Accidental release measures

Large spill: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

Handling: Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Product name</th>
<th>United States</th>
</tr>
</thead>
</table>
                         TWA: 6 mg/m³ 8 hour(s). |

<table>
<thead>
<tr>
<th>Product name</th>
<th>Canada</th>
</tr>
</thead>
</table>
| Precipitated silica | CA Alberta Provincial (Canada, 10/2006).  
                         8 hrs OEL: 10 mg/m³ 8 hour(s). |
|                  | CA British Columbia Provincial (Canada, 7/2007).  
                         TWA: 4 mg/m³ 8 hour(s).  
                         TWA: 1.5 mg/m³ 8 hour(s). Form: Respirable |
|                  | CA Ontario Provincial (Canada, 3/2007).  
                         TWAEV: 10 mg/m³ 8 hour(s). |
|                  | CA Quebec Provincial (Canada, 12/2006).  
                         TWAEV: 6 mg/m³ 8 hour(s). Form: Respirable dust. |

<table>
<thead>
<tr>
<th>Product name</th>
<th>Mexico</th>
</tr>
</thead>
</table>
| Precipitated silica | NOM-010-STPS (Mexico, 9/2000).  
                         LMPE-PPT: 10 mg/m³ 8 hour(s). |

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
8. Exposure controls/personal protection

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes: Safety glasses.
Skin: Lab coat.
Respiratory: A respirator is not needed under normal and intended conditions of use.
Hands: Natural rubber (latex).

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Physical state: Solid.
Color: Colorless to white.
Specific gravity: Not available.
Solubility: Insoluble in the following materials: cold water and hot water.

10. Stability and reactivity

Stability: The product is stable.
Hazardous polymerization: Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid: No specific data.
Incompatibility with various substances: Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Acute toxicity

Inhalation: May cause respiratory tract irritation.
Ingestion: No known significant effects or critical hazards.
Skin: May cause skin irritation.
Eyes: May cause eye irritation.

Carcinogenicity
Classification

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>EPA</th>
<th>NIOSH</th>
<th>NTP</th>
<th>OSHA</th>
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<tbody>
<tr>
<td>Precipitated silica</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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12 . Ecological information

Environmental effects: No known significant effects or critical hazards.
Other adverse effects: No known significant effects or critical hazards.
Environmental precautions: No known significant effects or critical hazards.
Products of degradation: Not applicable.

13 . Disposal considerations

Waste disposal: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

AERG: Not applicable.

Regulatory information
DOT/ TDG / Mexico IMDG/ IATA: Not regulated.

15 . Regulatory information

United States

HCS Classification: Not regulated.
U.S. Federal regulations:
United States inventory (TSCA 8b): All components are listed or exempted.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations:
Connecticut Carcinogen Reporting: None of the components are listed.
Connecticut Hazardous Material Survey: None of the components are listed.
Florida substances: None of the components are listed.
Illinois Chemical Safety Act: None of the components are listed.
Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.
Louisiana Reporting: None of the components are listed.
Louisiana Spill: None of the components are listed.
Massachusetts Spill: None of the components are listed.
Massachusetts Substances: The following components are listed: Precipitated silica
Michigan Critical Material: None of the components are listed.
Minnesota Hazardous Substances: None of the components are listed.
New Jersey Hazardous Substances: None of the components are listed.
New Jersey Spill: None of the components are listed.

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15. Regulatory information

New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
New York Acutely Hazardous Substances: None of the components are listed.
New York Toxic Chemical Release Reporting: None of the components are listed.
Pennsylvania RTK Hazardous Substances: None of the components are listed.
Rhode Island Hazardous Substances: None of the components are listed.

California Prop. 65
No products were found.

Canada
WHMIS (Canada) : Not controlled under WHMIS (Canada).
Canadian lists : CEPA Toxic substances: None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: None of the components are listed.
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

Canada inventory : All components are listed or exempted.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico
Classification :

International regulations
International lists : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16. Other information

Label requirements : MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
Hazardous Material Information System (U.S.A.) :

HAZARD RATINGS

4- Extreme
3- Serious
2- Moderate
1- Slight
0- Minimal

See section 8 for more detailed information on personal protection.

The customer is responsible for determining the PPE code for this material.

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

Date of issue : 06/20/2008
16. Other information

References


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Version : 1

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.