MATERIAL SAFETY DATA SHEET

Product Name: **PURASIL**

Not classified as a hazardous substance according to criteria of NOHSC

1. **IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**

Product name | PURASIL
---|---
Other names | Diatomaceous earth, Amorphous silica
Product use | Used as soil improver to provide plant available silica
Company Name | Mount Sylvia Diatomite Pty Ltd.
Address | 35 Wongoola Close, O’Connor, ACT, 2606
Emergency Tel. | 02 6161 5992
Telephone/fax | 02 6161 5992 Fax: 02 6248 6066

2. **HAZARDS IDENTIFICATION**

Not classified as hazardous according to the criteria of NOHSC. Must be stored under dry, well-ventilated conditions.

Not classified as dangerous goods according to the ADG code.

3. **COMPOSITION/INFORMATION ON INGREDIENTS**

| Composition, Information on ingredients | Diatomaceous earth, which is a natural product, derived from the remains of freshwater plankton. The product contains less than 3% respirable crystalline silica. |
| Chemical Ingredients | Powder |
| Name | CAS | Proportion |
| Diatomaceous earth | 61790-53-2 | 84-90% |
| Silica as quartz | 14808-60-7 | <3% |

Other information

Mineralogy

Amorphous silica as diatom microfossils generally 84 to 90%, quartz generally less than 3%, clays (montmorillonite and kaolin) 8 to 14%.

4. **FIRST AID MEASURES**

**Inhalation**
Move the victim to fresh air. Drink a glass of water to clear throat and blow nose to evacuate dust. If irritation persists see a doctor.

**Ingestion**
Wash out mouth with water. If irritation persists seek medical advice.

**Skin**
Wash gently with water and non-abrasive soap. If irritation develops and persists, seek medical attention.

**Eye**
If contact with eye(s) occurs, wash with water while holding lid open. If irritation persists, seek medical attention.

**First aid facilities**
Eye wash and normal washroom facilities.

**Advice to doctor**
Treat symptomatically. The hazard from the product is the same as from any fine, inert dust. The product absorbs moisture and may cause dryness in contact with mucous membranes. Pre-existing upper respiratory and lung conditions such as bronchitis, emphysema or asthma may be aggravated by exposure to the dust.

5. **FIRE FIGHTING MEASURES**

**Flammability**
The material is not flammable.

**Means of extinction**
Use appropriate fire extinguisher for surrounding environment.
6. ACCIDENTAL RELEASE MEASURES
Increase ventilation. Wear sufficient respiratory protection and protective clothing and sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container. Use absorbent paper dampened with water to pick up remaining material. Prevent the release from entering a waterway or sewer. Dispose of any contaminated material at an approved facility such as a municipal landfill.

7. HANDLING AND STORAGE
This material is stable and should be stored in a well-ventilated, dry, cool environment.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Exposure limits
The following National Occupational Health and Safety Commission (NOHSC) Exposure limits apply:

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica: quartz, cristobalite</td>
<td>ppm 0.2</td>
</tr>
<tr>
<td>Silica: amorphous (diatomaceous earth)</td>
<td>ppm 10</td>
</tr>
<tr>
<td>Dust, not otherwise specified</td>
<td>ppm 10</td>
</tr>
</tbody>
</table>

Other exposure Information

TWA – The Time-Weighted Average airborne concentration over an eight hour working day, for a five-day working week over an entire working life. According to current knowledge these concentrations should neither impair the health of, nor cause undue discomfort to nearly all workers. These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept as low as possible. Exposure standards should not be used as a fine dividing line between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Respiratory Protection
Where sufficient ventilation is not available avoid breathing dusts by wearing an AS 1716 approved particulate filter respirator. For the most appropriate respirator device, reference should be made to AS/NZS 1715/1716 standards publication, which deals with respiratory protective devices.

Eye protection
The use of chemical goggles or safety glasses with side shield protection is recommended.

Hand protection
The use of nitrile gloves is recommended.

Eng. Controls
Natural ventilation should be sufficient, however a mechanical exhaust system is recommended if the product is being handled in a poorly ventilated area.

Other information
Biological Limit Values: No biological limit allocated.

9. PHYSICAL AND CHEMICAL PROPERTIES
Appearance
White to light grey granules and/or dust.
Odour
No odour
Melting point
1500 degrees C (aprox).
Boiling point
Not applicable
Solubility in water
Insoluble
10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of use.

Hazardous: Will not occur.

Polymerisation: None

11. TOXICOLOGICAL INFORMATION

Toxicology information: No toxicology information is available for this product. However for crystalline silica the following data has been extracted from the Register of Toxic Effects of Chemical Substances:

TOxicity

- Inhalation (human) LCLo: 0.3/m³/10Y
- Inhalation (human) TCLo: 16mppcf/8H/17.9Y
- Intermittent; focal fibrosis, (pneumoconiosis), cough, dyspnoea.
- Inhalation (rat) TCLo: 50mg/m³/6H/71W
- Intermittent; liver – tumours.

WARNING: For inhalation exposure only: Crystalline silica (respirable size <=7µm) has been classified by the IARC as Group 1 CARCINOGENIC TO HUMANS.

NOTE: The physical nature of quartz in the product determines whether it is likely to present a chronic health problem. To be a hazard the material must enter the breathing zone as respirable particles.

Inhalation

Inhalation of dust may cause irritation to the mucous membranes and upper airways. Symptoms of exposure can include nausea, coughing, sneezing and breathing difficulties.

Ingestion

Not a likely source of exposure. May cause irritation to the mouth, oesophagus and stomach.

Skin

May cause drying of the skin resulting in redness and itching.

Eye

May cause mechanical irritation in contact with the eyes.

Chronic Effects

Prolonged or repeated exposure to this material may result in irritation to the eyes and respiratory tract. As this product may contain traces of respirable silica, bronchitis, silicosis, and lung cancer may occur if the required dust mask is not worn during prolonged and repeated exposure. Studies have shown that smoking increases the risk in persons exposed to crystalline silica.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data is available for this material.

Persistence/degradability: No data is available for this material.

Mobility: No data is available for this material.
13. DISPOSAL CONSIDERATIONS

Disposal method and containers: Dispose of waste material at an approved municipal landfill or land application site. No special containers are required.

Other information: In NSW, diatomaceous earth used as cat litter in a domestic situation can be disposed of with the normal domestic waste stream i.e in the garbage bin. The NSW EPA does not regulate domestic waste sources.

14. TRANSPORT INFORMATION

Not classified as a Dangerous Good, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

ADG UN Number: None allocated
ADG Proper: None allocated
Dangerous goods class: None allocated
Subsidiary Risk: None
Hazchem Code: None allocated

15. REGULATORY INFORMATION

Poisons schedule: Not scheduled

16. OTHER INFORMATION

Contact person/Point: Manager: Ph 61-2-61615992, Mine: 61-7-54629137

MSDS History: MSDS prepared October 2006 by I.R Neering, Director. Revised October 2011 by I.R. Neering, Director

END OF MSDS