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

Product name: BARAGEL® 3000
Product Use Description: Rheological additive
Company/Undertaking Identification: Elementis Specialties, Inc. 469 Old Trenton Road East Windsor, NJ 08512 USA Tel: (609) 443-2000 Elementis UK Ltd. c/o Elementis GmbH Stolberger Str. 370 USA 50933 Cologne, Germany Tel. +49 (0) 221 2923 2000
Emergency telephone number: For Chemical Emergency ONLY (spill, leak, fire, exposure or accident), call CHEMTREC at: 1-800-424-9300 or 1-703-527-3887 For ALL other inquiries about this product, call Elementis Specialties at: 1-609-443-2000 (USA) or +(49)-221-2923-2000 (EU)

Product_Stewardship@elementis.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance: Powder
Color: White
Odor: Odourless

WARNING

Harmful by inhalation
May cause slight eye irritation
May cause irritation of respiratory tract
Repeated and/or prolonged exposures may cause lung damage (Silicosis)
Contains crystalline silica (quartz) which may cause cancer
Risk of cancer depends on level and duration of exposure

Potential health effects:

Eye contact: May cause slight eye irritation. Signs and symptoms include burning, tearing, redness and swelling.
Skin contact: Non-irritating to the skin.
### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica (Quartz)</td>
<td>14808-60-7</td>
<td>&lt; 3%</td>
</tr>
</tbody>
</table>

This product is considered hazardous as defined under OSHA's Hazard Communication Standard (29 CFR 1910.1200).

### 4. FIRST AID MEASURES

**Inhalation:** IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen.

**Skin contact:** Wash off immediately with soap and plenty of water. If a person feels unwell or symptoms of skin irritation appear, consult a physician.

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

**Ingestion:** If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

### 5. FIRE-FIGHTING MEASURES

**Flash Point:** Not applicable

**Autoignition temperature:** Not selfigniting

**Unusual Fire and Explosion Hazards:** Excess dust dispersed in air represents an explosion hazard in the presence of electrical sparks and static discharges.

**Reactivity Hazard:** None known

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**Hazardous combustion products:** Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx).
Special Fire Fighting Procedure: Wear self contained breathing apparatus for fire fighting if necessary

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Take precautionary measures against static discharges. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Clean-up methods: Do not create a powder cloud by using a brush or compressed air. Take up mechanically and collect in suitable container for disposal. Prevent product from entering drains. Clean contaminated surface thoroughly. Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

Handling: Take measures to prevent the build up of electrostatic charge. Remove all sources of ignition. Avoid contact with skin, eyes and clothing. Avoid breathing mists, dusts, or vapors. Wash hands thoroughly after handling.

Storage: Keep containers tightly closed in a cool, well-ventilated place. Keep product and empty container away from heat and sources of ignition.

Additional Storage: Not required under normal use

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Maintain adequate ventilation to keep hazardous ingredients below their PELs or TLVs. Use NIOSH/MSHA approved respirator whenever exposure limits exceeded.

Personal Protective Equipment

Eye protection: Safety glasses

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place

Respiratory protection: In the case of respirable dust and/or fumes, use self-contained breathing apparatus.

Hand protection: Protective gloves, Neoprene gloves

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Exposure controls
Components | OSHA STEL | OSHA PEL | OSHA TWA | ACGIH STEL | ACGIH TWA |
--- | --- | --- | --- | --- | --- |
Crystalline silica (Quartz) | 0.1 mg/m³ (respirable fraction) | 0.1 mg/m³ (respirable fraction) | 0.025 mg/m³ (respirable fraction) |

**TLV/PEL:**
- Particles (insoluble or poorly soluble)
- Not Otherwise Specified [PNOS]

**OSHA TWA**
- 15 mg/m³ (total dust)
- 5 mg/m³ (respirable fraction)

**ACGIH TWA**
- 10 mg/m³ (inhalable particles)
- 3 mg/m³ (respirable particles)

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Powder

**Color:** White

**Odor:** Odourless

**Physical state:** Solid

**Solubility:** Water insoluble

**Density:** 1.7 g/cm³

**Flash Point:** Not applicable

**Explosive properties:** Powdered material may form explosive dust-air mixtures

**Solvent content:**
- Water content: Not applicable

### 10. STABILITY AND REACTIVITY

**Stability:** Stable at normal conditions

**Conditions to avoid:** Heat, flames and sparks

**Materials to avoid:** Oxidizing agents

**Hazardous decomposition products:** No decomposition if stored normally

**Possibility of Hazardous Reactions:** None known

### 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**
Components | LC50/inhalation/4h/Rat | LD50/Dermal/Rat | LD50/Oral/Rat
--- | --- | --- | ---
Crystalline silica (Quartz) | No data available | No data available | 500 mg/kg

**Product Information:**

The data listed, below, is based on this or a similar product:

**LD50/Oral/Rat:**

> 8000 mg/kg (rat)

**Local effects**

**Skin irritation:** Non-irritating to the skin.

**Eye irritation:** Contact with eyes may cause irritation.

**Inhalation:** May cause irritation of respiratory tract.

**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Sensitization:** No sensitizing effects known.

**Chronic toxicity:** No data is available on the product itself

**Specific effects**

**Carcinogenic effects:** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B)

<table>
<thead>
<tr>
<th>Components</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica (Quartz)</td>
<td>Group A - Known to be human carcinogens</td>
<td>Group 1 - Carcinogenic to Humans</td>
<td>Present</td>
</tr>
</tbody>
</table>

**Target Organs:** Kidney, Respiratory system

**12. ECOLOGICAL INFORMATION**

**Aquatic toxicity:**

**Product Information:** No data available

**Persistence and degradability:** No data available

**Environmental Fate and Pathways:**

**Mobility:** No data available

**Biodegradability:** No data available

**Bioaccumulative potential:** No data available

**Revision Number:** 2.1
Physical / Chemical: No data available

BOD/COD:
COD-value: No data available
BOD5-value: No data available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with Local and National regulations.

RCRA Hazardous Waste:
RCRA: Not listed

14. TRANSPORT INFORMATION

U.S. Department of Transportation Ground (49 CFR):
Proper shipping name: Not regulated

International Air Transportation (ICAO/IATA):
Proper shipping name: Not regulated

International Maritime Organization (IMO/IMDG):
Proper shipping name: Not regulated

Surface Shipments in Europe (ADR/RID):
Proper shipping name: Not regulated

15. REGULATORY INFORMATION

Heavy metals:

Heavy metals content (ppm): Not applicable

International Inventories
U.S. Regulations

TSCA Section 12(b) Export Notification

This product does not contain chemicals that are required to be notified under the TSCA 12(b) Export Notification.

SARA Title III:

Section 302 EHS: None
Section 311/312: Chronic Health Hazard
Section 313: Not listed

California Prop. 65:
This Product contains the following substance(s) known to the state of California to cause cancer and/or developmental effects.

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Reproductive toxicity</th>
<th>No significant risk level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica (Quartz)</td>
<td>Listed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Canada

WHMIS hazard class: D2A Possible, probable or known human carcinogen according to classifications by IARC or ACGIH.

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

HMIS:
Health: 1 *
Flammability: 1
Reactivity: 0

Previous Revision Date: 13-Aug-2009

Revision Number: 2.1
Key/Legend:
N/A: Not applicable
N/D: Not determined
ppm: Parts per million
X: Listed

Prepared by: Product Stewardship

The data set forth in these sheets are based on information provided by the suppliers of the raw materials and chemicals used in the manufacture of the aforementioned product. ELEMENTIS SPECIALTIES makes no warranty with respect to the accuracy of the information provided by their suppliers, and declaims all liability of reliance thereon. ELEMENTIS SPECIALTIES warrants only that its products conforms with their published specifications, and no other express warranty is made with regards thereof. We do not guarantee favorable results, and we assume no liability in connection with the use of the products. They are intended for use by persons having technical skill and knowledge, at their own discretion and risk.