

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC, Article 31

Revision Date: 10-Aug-2010

Supersedes: 01-Dec-2006

MSDS Number: 10810

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

Product name: BARAGEL® 3000

Product Use Description: Rheological additive

Company/Undertaking Identification: Elementis UK Ltd.
c/o Elementis Specialties
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2. HAZARDS IDENTIFICATION**Classification:** none**Potential health effects:**

Inhalation: Harmful by inhalation. May cause irritation of respiratory tract. Repeated and/or prolonged exposures may cause lung damage (Silicosis).

Skin contact: Non-irritating to the skin.

Eye contact: May cause slight eye irritation. Signs and symptoms include burning, tearing, redness and swelling.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Exposure routes: Inhalation, Skin, Ingestion

Target organ effects: Lungs

See Sections 11 & 12 for additional toxicological and ecological information

Environmental hazard: The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification of Preparation / Substance: The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous Components**

| Chemical Name | CAS-No | EC-No. | Weight percent | Classification |
|-----------------------------|------------|-----------|----------------|----------------|
| Crystalline silica (Quartz) | 14808-60-7 | 238-878-4 | < 3% | |

For components with critical values that require monitoring at the workplace See Section 8.

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, for at least 15 minutes. 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.

Notes to physician: Treat symptomatically

5. FIRE-FIGHTING MEASURES

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

Extinguishing media which must not be used for safety reasons: none

Hazardous combustion products: Carbon monoxide, Carbon dioxide (CO₂), nitrogen oxides (NO_x)

Decomposition temperature: no data available

Special Fire Fighting Procedure: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. 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: Sweep up and shovel into suitable containers for disposal. Prevent product from entering drains. Clean spill area thoroughly. Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

Handling: 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.

Incompatible products: No information available

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

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

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

| Chemical Name | EU TWA | EU STEL | OEL - Long-term TWA | OES - Short-term STEL |
|-----------------------------|-----------------------|-----------------------|---------------------|-----------------------|
| Crystalline silica (Quartz) | 0.1 mg/m ³ | 0.1 mg/m ³ | | |

| Chemical Name | Belgium TWA | Belgium STEL | Austria MAK | Austria TRK |
|-----------------------------|-----------------------|--------------|------------------------|-------------|
| Crystalline silica (Quartz) | 0.1 mg/m ³ | | 0.15 mg/m ³ | |

| Chemical Name | Denmark TLV | Denmark MAL | Finland TWA | Finland STEL |
|-----------------------------|--|-------------|-----------------------|--------------|
| Crystalline silica (Quartz) | 0.1 mg/m ³ 0.3 mg/m ³ | | 0.5 mg/m ³ | |

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: powder
Colour: white
Odour: odourless

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: solid

Flash point: Not applicable
Autoignition temperature: Not selfigniting

Density: 1.7 g/cm³

Solubility: Water insoluble

Solvent content:
Percent volatile: Not applicable
Water content: Not applicable

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Conditions to avoid: Heat, flames and sparks.

Materials to avoid: oxidising agents

Hazardous decomposition products: No decomposition if stored normally.

Possibility of hazardous reactions: No information available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

| Chemical Name | 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 diarrhoea.

Chronic toxicity: Long-term chronic toxicity studies to evaluate the carcinogenic potential of this product have not been conducted; See table and/or data, below, of individual components.

Specific effects

Target organ effects: Lungs

12. ECOLOGICAL INFORMATION**Aquatic toxicity:**

Product Information: No data available

Persistence and degradability: no data available

Environmental fate and pathways:

Mobility: Not applicable

Biodegradability: no data available

BOD/COD:

COD-value: no data available

BOD5-value: no data available

Water Hazard Class (WGK): Class 1 Slightly hazardous to water.

General Note: Do not allow product to reach ground water, water course or sewage system.

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.

EWC waste disposal No: According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Further Information: Waste codes should be assigned by the user based on the application for which the product was used

Contaminated packaging: Empty containers should be taken to local recyclers for disposal

14. TRANSPORT INFORMATION**Surface Shipments in Europe (ADR/RID):**

Proper shipping name: not regulated

International Air Transportation (ICAO/IATA):

Proper shipping name: not regulated

14. TRANSPORT INFORMATION**International Maritime Organization (IMO/IMDG):**

Proper shipping name: not regulated

15. REGULATORY INFORMATION**International Inventories**

| | | | |
|----------------------|--------|--------------------|----------------|
| TSCA/ (USA) | Listed | EINECS/ (EU) | Listed |
| DSL/ (CANADA) | Listed | NDSL/ (CANADA) | Not applicable |
| KECL (KOREA) | Listed | ENCS/ (JAPAN) | Listed |
| PICCS/ (PHILIPPINES) | Listed | AICS/ (AUSTRALIA) | Listed |
| IECSC/ (CHINA) | Listed | HSNO/ New Zealand: | Listed |

Classification: none

contains: Crystalline silica (Quartz)

R -phrase(s): none

S -phrase(s): none

Restriction on marketing use: None known

Water Hazard Class (WGK): Class 1 Slightly hazardous to water

16. OTHER INFORMATION**Text of R Phrases mentioned in Section 3:**

Previous Revision Date: Not applicable

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 disclaims 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.