ELEMENTIS

MATERIAL SAFETY DATA SHEET

Revision date: 21-Sep-2007 Supercedes: 05-Feb-2007 MSDS Number: 10799

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

Product name: BENTONE® SD-1

Product Use Description: Rheological additive

Company/Undertaking

Identification

Elementis Specialties, Inc. 329 Wyckoffs Mill Road

Hightstown, NJ 08520

(609) 443-2000

Elementis Specialties, Inc.

p/a Elementis Service Centre NV

Pegasus Park

De Kleetlaan 12A - P.O. Box 3 B-1831 Diegem, Belgium +32 (0)2 790 76 00

Emergency telephone number: CHEMTREC Emergency Response Number: 1-800-424-9300 (1-703-527-3887)

SGS Emergency Response Number: + 32 (0)3 575 55 55

Product Stewardship@elementis.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance:PowderColor:Light creamOdor:Odourless

WARNING

May cause slight eye irritation.

May cause irritation of respiratory tract.

CONTAINS CRYSTALLINE SILICA (QUARTZ) WHICH MAY CAUSE CANCER. Repeated and/or prolonged exposures may cause lung damage (Silicosis).

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.

Inhalation: May cause irritation of respiratory tract. Long term exposure to airborne

concentrations may cause lung damage.

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

Routes of exposure: Inhalation, Skin, Ingestion

Target Organs: Lungs

See Sections 11 & 12 for additional toxicological and ecological information

Environmental hazard: See Section 12, below

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

Components	CAS-No	Weight %
Crystalline silica (Quartz)	14808-60-7	< 3.0%

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

4. FIRST AID MEASURES

Inhalation: Move to fresh air in case of accidental inhalation of dust or fumes from overheating

or combustion. 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.

5. FIRE-FIGHTING MEASURES

Flash Point: Not applicable

Autoignition temperature: Not selfigniting

Explosive properties: LEL: 0.10 oz/cu.ft.

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

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

and full protective clothing

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: 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: Sweep up and shovel into suitable containers for disposal. 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.

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: Wear face protection.

Skin and body protection: Wear protective clothing and impervious gloves (natural rubber, neoprene) to avoid

skin contact.

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

Hand protection: Protective 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/m ³ (respirable fraction)

TLV/PEL: Nuisance Dust

OSHA TWA 15 mg/m³ (total dust)

5 mg/m³ (respirable fraction)

ACGIH TWA 10 mg/m³ (total dust)

3 mg/m³ (respirable fraction)

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:PowderColor:Light creamOdor:OdourlessPhysical state:Solid

Solubility: Water insoluble

Specific Gravity: 1.47

Bulk density: 12.3 lbs/gal Flash Point: 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:

Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx)

Possibility of Hazardous

Reactions:

Will not occur

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: > 5000 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.

Chronic toxicity: See table and/or data, below

Components	NTP	IARC	OSHA
Crystalline silica (Quartz)	Group 2A	Group 1- Carcinogenic to	Present
		Humans	

Specific effects

Carcinogenic effects: Crystalline silica has been reviewed by IARC. IARC working group found sufficient

evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite from occupational sources. There is sufficient evidence in experimental animals for the carcinogenicity of quartz and cristobalite. Therefore, IARC working group has classified Crystalline Silica as carcinogenic to humans

(Group 1).

Target Organs: Lungs

12. ECOLOGICAL INFORMATION

Aquatic toxicity:

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

LC50/96hr/48hr/24hr > 500 mg/L (Rainbow trout)

> 300 mg/L (Daphnia magna; 48hr) > 230 mg/L (Daphnia magna; 96hr)

Persistence and degradability:

No data available

Environmental Fate and

Pathways:

Mobility: No data available

Biodegradability: No data available

Bioaccumulative potential: No data available

Physical / Chemical: 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

TSCA/ Listed EINECS/ Listed

(USA) (EU)

DSL/ On the confidential DSL NDSL/ Not applicable

(CANADA) (CANADA)

ENCS/ Listed IECSC/ Listed

(JAPAN) (CHINA)

PICCS/ Listed KECL Listed

(PHILLIPINES) (KOREA)

AICS/ Listed HSNO/ Listed

(AUSTRALIA) New Zealand:

U.S. Regulations

TSCA Section 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

Components	Carcinogen	Reproductive toxicity	No significant risk level
Crystalline silica (Quartz)	Listed		

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: 05-Feb-2007

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.