

Revision date: 26-May-2009

Supercedes: 10-Jan-2008

MSDS Number: 10800

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

Product name: BENTONE® SD-2

Product Use Description: Rheological additive

Company/Undertaking Identification

Elementis Specialties, Inc.
329 Wyckoffs Mill Road
Hightstown, NJ 08520
Tel: (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
Tel: +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: Powder
Color: Light cream
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.

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

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, Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Gaseous hydrogen chloride (HCl).

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. 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.

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/m ³ (respirable fraction)	0.1 mg/m ³ (respirable fraction)		0.025 mg/m ³ (respirable fraction)

TLV/PEL	Particles (insoluble or poorly soluble) Not Otherwise Specified [PNOS]
OSHA TWA	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
ACGIH TWA	10 mg/m ³ (total dust) 3 mg/m ³ (respirable fraction)

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Powder
Color:	Light cream
Odor:	Odourless
Physical state:	Solid
Solubility:	Water insoluble
Density:	1.62 g/cm ³
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:	No decomposition if stored normally
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:	See below
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: 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

Components	NTP	IARC	OSHA
Crystalline silica (Quartz)	Group A - Known to be human carcinogens	Group 1- Carcinogenic to Humans	Present

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: See below

LC50/96hr/48hr/24hr > 500 mg/L (Rainbow trout)
300 mg/L (Daphnia magna; 48hrs)
> 230 mg/L (Daphnia magna; 96hrs)

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/ (USA)	Listed	EINECS/ (EU)	Listed
DSL/ (CANADA)	On the confidential DSL	NDSL/ (CANADA)	Not applicable
ENCS/ (JAPAN)	Listed	IECSC/ (CHINA)	Listed
PICCS/ (PHILLIPINES)	Listed	KECL (KOREA)	Listed
AICS/ (AUSTRALIA)	Listed	HSNO/ New Zealand:	Listed

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.

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

This Material Safety Data Sheet contains changes from the previous version in Sections: 2, 4, 8, 10, 11 & 15

Previous Revision Date: 10-Jan-2008

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.