ELEMENTIS

MATERIAL SAFETY DATA SHEET

Revision date: 26-May-2009 Supercedes: 10-Jan-2008 MSDS Number: 10793

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

Product name: Bentone® 34

Product Use Description: Rheological additive

Company/Undertaking

Identification

Elementis Specialties, Inc.

329 Wyckoffs Mill Road

Elementis Specialties, Inc.

p/a Elementis Service Centre NV

Hightstown, NJ 08520 Pegasus Park

Tel: (609) 443-2000 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:PowderColor:Off-whiteOdor:Odourless

WARNING

Harmful by inhalation May cause slight 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 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: 0.07 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 (NOx), Gaseous hydrogen

chloride (HCI).

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 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 dust/fume/gas/mist/vapours/spray. 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: Flame retardant protective clothing.

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

TLV/PEL Particles (insoluble or poorly soluble)

Not Otherwise Specified [PNOS]

OSHA TWA 10 mg/m³ (inhalable particles)

5 mg/m³ (respirable particles)

ACGIH TWA 10 mg/m³ (inhalable particles)

3 mg/m³ (respirable particles)

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:PowderColor:Off-whiteOdor:OdourlessPhysical state:Solid

Solubility:Water insolubleDensity:1.7 g/cm³Flash 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:

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

<u>Product Information:</u> See below

LC50/inhalation/4h/rat: > 12.6 mg/L/4 hr (rat) **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 A - Known to be human	Group 1- Carcinogenic to	Present
	carcinogens	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: 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

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 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/ Listed 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

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 4, 5, 8, 10 & 15

contains changes from the previous version in Sections:

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 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.