



A global specialty chemicals company

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 2012

Revision date: 30-Aug-2018

Supersedes: 23-May-2016

SDS Number: 10799

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

Product Identifier

Product name: BENTONE SD®-1

Other means of identification

Recommended use of the chemical and restrictions on use

Product Use Description: Rheological additive

Details of the supplier of the safety data sheet

Company/Undertaking Identification

Elementis
469 Old Trenton Road
East Windsor, NJ 08512
USA
Tel: +1 609 443 2500
Fax: +1 609 443 2422

Elementis UK Ltd.
c/o Elementis GmbH
Stolberger Str. 370
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 at: 1-609-443-2000 (USA) or +49 (0) 221 2923 2000 (EU)

Product_Stewardship@elementis.com

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2

Label Elements

EMERGENCY OVERVIEW

Danger

Hazard Statements

May cause cancer by inhalation
May cause damage to organs through prolonged or repeated exposure
May form combustible dust concentrations in air

**Appearance:** Powder**Physical state:** Solid**Odor:** Odourless**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

May form combustible dust concentrations in air

Other Information

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components, or components with exposure limits (see section 8)

Components	CAS-No	Weight %
Confidential organoclay	-	50 - 100 %
Crystalline Silica (Quartz)	14808-60-7	2.5 - 10 %

4. FIRST AID MEASURES

FIRST AID MEASURES**General Advice**

Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance.

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 carefully and thoroughly with eye-bath or water. If eye irritation persists, consult a specialist.

Ingestion

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

Protection of first-aiders:

Avoid contact with skin and eyes.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

Carbon dioxide (CO₂)
Dry powder
Dry sand
Alcohol-resistant foam
Use water spray or fog; do not use straight streams

Extinguishing media which must not be used for safety reasons

None

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

None in particular

Unusual Fire and Explosion Hazards:

Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard

Hazardous combustion products

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

Explosion data**Explosive properties:**

Dust may form explosive mixture in air

Reactivity Hazard:

None known

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions Keep people away from and upwind of spill/leak. Use personal protective equipment.

Other Information: See Section 12 for more information.

Environmental precautions

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

Methods and material for containment and cleaning up

Clean-up methods: Take precautionary measures against static discharges. Do not create a powder cloud by using a brush or compressed air. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains.

Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling: Take precautionary measures against static discharges. 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.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep product and empty container away from heat and sources of ignition.

Additional Storage: Not required under normal use

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Components	OSHA STEL	OSHA PEL	OSHA TWA	OEL - Long-term TWA
Crystalline Silica (Quartz)		0.05 mg/m ³ (respirable fraction)	0.1 MGM3 (respirable fraction)	

Components	ACGIH TLV	AIHA TLV	OSHA TWA	IDLH:
Crystalline Silica (Quartz) 14808-60-7	TWA: 0.025 mg/m ³			50 mg/m ³ respirable dust

Components	WEEL Ceiling	WEEL TWA	ACGIH	WEEL STEL
Crystalline Silica (Quartz)			A2 Suspected Human Carcinogen	

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 (total dust)
3 mg/m³ (respirable fraction)

Appropriate engineering controls

Engineering Measures Maintain adequate engineering controls and/or ventilation to keep hazardous ingredients below their statutory limits. Use an approved respirator whenever exposure limits are exceeded

Individual protection measures, such as 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: Effective dust mask.

Hand protection Protective gloves

Neoprene gloves
Impervious butyl rubber gloves
Nitrile rubber

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state:	Solid
Appearance:	Powder
Odor:	Odourless
Color:	Light cream
Odor Threshold	No data available

<u>Property</u>	<u>Values</u>	<u>Remarks / • Method</u>
pH	No data available	
Melting point/range:	No data available	
Freezing point:	No data available	
Boiling Point/Range	No data available	
Flash Point	Not applicable	
Evaporation rate	No data available	
Explosion limits:	No data available	
Vapor pressure	No data available	
Vapor density	No data available	
Density:	1.47 g/cm ³	
Water solubility	insoluble	
Solubility in other solvents	No data available	
Partition coefficient: n-octanol/water	No data available	
Autoignition temperature	Not self-igniting	
Decomposition temperature	No data available	
Viscosity:	No data available	

Explosive properties:	Dust may form explosive mixture in air
Oxidizing Properties	No information available

Other Information

Bulk Density	No data available
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10. STABILITY AND REACTIVITY**Reactivity**

No dangerous reaction known under conditions of normal use

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None known

Conditions to Avoid

Heat, flames and sparks

Incompatible Materials:

Oxidizing agent

Hazardous Decomposition Products

None reasonably foreseeable

11. TOXICOLOGICAL INFORMATION

Product Information

Data obtained on this product or a similar product

LD50/Oral/Rat: > 5000 mg/kg**Information on likely routes of exposure****Inhalation:** Repeated and/or prolonged exposures may cause lung damage (Silicosis)**Eye contact:** No data available**Skin contact:** No data available**Ingestion** No data available**Component Information**

Components	LD50/Oral	LD50/Dermal	LC50/inhalation
Crystalline Silica (Quartz) 14808-60-7	500 mg/kg		

Information on Toxicological Effects**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Corrosivity** No data available**Sensitization** No data available**Mutagenic effects** No data available

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)

Components	ACGIH	IARC	NTP	OSHA
Crystalline Silica (Quartz) 14808-60-7	A2 Suspected Human Carcinogen	Group 1- Carcinogenic to Humans	Group A - Known to be human carcinogens	Present

Reproductive Toxicity: No data available**Developmental Toxicity** No data available**Chronic Toxicity****Chronic toxicity:** No data is available on the product itself**Target Organ Effects:** Kidney, Respiratory system.**Other Adverse Effects:** No data available**12. ECOLOGICAL INFORMATION****Product Information**

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

LC50

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

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Persistence and degradability:

No data available

Bioaccumulative potential:

No data available

Mobility

No information available

General Note:

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

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste from residues /unused products**

Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with federal, state and local regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

RCRA Hazardous Waste:

RCRA:

Not listed

14. TRANSPORT INFORMATION**U.S. Department of Transportation Ground (49 CFR):**

Not regulated

International Air Transport Association (IATA)

Not regulated

International Maritime Dangerous Goods (IMDG)

Not regulated

Surface Shipments in Europe (ADR/RID):

Not regulated

15. REGULATORY INFORMATION**International Inventories**

USA (TSCA):	Complies
EU (EINECS):	Complies
EU REACH:	Complies
CANADA (DSL)	Complies
CANADA (NDSL):	Not applicable
JAPAN (ENCS):	Complies
PHILIPPINES (PICCS):	Complies
KOREA (KECL):	Complies
China (IECSC)	Complies
AUSTRALIA (AICS):	Complies
NEW ZEALAND (NZIoC):	Complies
TAIWAN (NECI):	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
NECI - Taiwan National Existing Chemical Inventory

EU-Regulations

For purchases from Elementis EU legal entities, all ingredients are currently registered or exempt under REACH. For purchases from non-EU Elementis legal entities with the intention to export into the EU, please contact your Elementis representative/local office.

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Chronic Health Hazard

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

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.

State Regulations (RTK)

California Proposition 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) 14808-60-7	Listed		

16. OTHER INFORMATION

HMIS:

Health: 1 *
Flammability: 1
Physical Hazard: 0

This Material Safety Data Sheet 8
contains changes from the previous
version in Sections:

Previous Revision Date: 23-May-2016

Key/Legend: N/A: Not applicable
N/D: Not determined

ppm: Parts per million
X: Listed

Prepared by

Product Stewardship

The information provided in this Safety Data Sheet is correct to the best of ELEMENTIS' knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific product designated and may not be valid for such product when used in combination with any other material or in any process, unless specified in this SDS. ELEMENTIS specifically disclaims any liability for any loss, injury or damage which may result from use or misuse of this product. All chemicals should be handled only by competent personnel, within a controlled environment. It is the buyer's/user's responsibility to ensure that his activities comply with all applicable federal, state, provincial and local laws, and to determine the conditions necessary for the safe use of this product. ELEMENTIS urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product.

End of Safety Data Sheet