SAFETY DATA SHEET



1. Identification

Product identifier BENTOSEAL

Other means of identification None.

Recommended useNot available. **Recommended restrictions**None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name

Address

CETCO, an MTI Company
2870 Forbs Avenue
Hoffman Estates, IL 60192

United States

Telephone General Information 800 527-9948

Website http://www.cetco.com/

E-mail safetydata@mineralstech.com

Emergency phone number Emergency 1.866.519.4752/1 760 476 3962

Americas 1.866.519.4752 (US, Canada, Mexico) 1 760 476 3962

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2B
Carcinogenicity Category 1A
Specific target organ toxicity, repeated Category 1

exposure

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes skin irritation. Causes eye irritation. May cause cancer. Causes damage to organs

through prolonged or repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face

protection.

Response If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Specific treatment (see on this label). If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off

contaminated clothing and wash before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

25.24% of the mixture consists of component(s) of unknown acute oral toxicity. 25.24% of the mixture consists of component(s) of unknown acute dermal toxicity. 12.5% of the mixture consists of component(s) of unknown acute inhalation toxicity. 25.24% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 25.24% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
STODDARD SOLVENT		8052-41-3	10 - < 20
TALC		14807-96-6	5 - < 10
QUARTZ (SIO2)		14808-60-7	3 - < 5
CRISTOBALITE		14464-46-1	1 - < 3
Other components below reportable	e levels		70 - < 80

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get

medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

General information

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s)

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

the chemical

Ingestion

Specific hazards arising from

Special protective equipment

and precautions for firefighters

Fire fighting

equipment/instructions

Specific methods
General fire hazards

Foam. Powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

During fire, gases hazardous to health may be formed.

involved, and take precautions to protect themselves.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

Material name: BENTOSEAL
15784 Version #: 02 Revision date: 25-July-2018 Issue date: 09-November-2016

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Components	s for Air Contaminants (29 CFR 1910.1000 Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	PEL	0.05 mg/m3	Respirable dust.
QUARTZ (SIO2) (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.
STODDARD SOLVENT (CAS 8052-41-3)	PEL	2900 mg/m3	
•		500 ppm	
US. OSHA Table Z-3 (29 CF	FR 1910.1000)		
Components	Туре	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable.
		1.2 mppcf	Respirable.
QUARTZ (SIO2) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
TALC (CAS 14807-96-6)	TWA	0.1 mg/m3	Respirable.
		20 mppcf	
		2.4 mppcf	Respirable.
IIS ACGIH Threshold Limi	it Values		Respirable.
	it Values Type		Respirable.
Components CRISTOBALITE (CAS		2.4 mppcf	·
Components CRISTOBALITE (CAS 14464-46-1) QUARTZ (SIO2) (CAS	Туре	2.4 mppcf Value	Form
Components CRISTOBALITE (CAS 14464-46-1) QUARTZ (SIO2) (CAS 14808-60-7) STODDARD SOLVENT	Type TWA	2.4 mppcf Value 0.025 mg/m3	Form Respirable fraction.
US. ACGIH Threshold Limi Components CRISTOBALITE (CAS 14464-46-1) QUARTZ (SIO2) (CAS 14808-60-7) STODDARD SOLVENT (CAS 8052-41-3) TALC (CAS 14807-96-6)	Type TWA TWA	2.4 mppcf Value 0.025 mg/m3 0.025 mg/m3	Form Respirable fraction.
Components CRISTOBALITE (CAS 14464-46-1) QUARTZ (SIO2) (CAS 14808-60-7) STODDARD SOLVENT (CAS 8052-41-3) TALC (CAS 14807-96-6)	Type TWA TWA TWA TWA	2.4 mppcf Value 0.025 mg/m3 0.025 mg/m3 100 ppm	Form Respirable fraction. Respirable fraction.
Components CRISTOBALITE (CAS 14464-46-1) QUARTZ (SIO2) (CAS 14808-60-7) STODDARD SOLVENT (CAS 8052-41-3) TALC (CAS 14807-96-6) US. NIOSH: Pocket Guide t	Type TWA TWA TWA TWA	2.4 mppcf Value 0.025 mg/m3 0.025 mg/m3 100 ppm	Form Respirable fraction. Respirable fraction.
Components CRISTOBALITE (CAS 14464-46-1) QUARTZ (SIO2) (CAS 14808-60-7) STODDARD SOLVENT (CAS 8052-41-3) TALC (CAS 14807-96-6) US. NIOSH: Pocket Guide t Components	Type TWA TWA TWA TWA TWA TO Chemical Hazards	2.4 mppcf Value 0.025 mg/m3 0.025 mg/m3 100 ppm 2 mg/m3	Form Respirable fraction. Respirable fraction. Respirable fraction.
Components CRISTOBALITE (CAS 14464-46-1) QUARTZ (SIO2) (CAS 14808-60-7) STODDARD SOLVENT (CAS 8052-41-3) TALC (CAS 14807-96-6) US. NIOSH: Pocket Guide to Components CRISTOBALITE (CAS 14464-46-1) QUARTZ (SIO2) (CAS	Type TWA TWA TWA TWA TWA TWA to Chemical Hazards Type	2.4 mppcf Value 0.025 mg/m3 0.025 mg/m3 100 ppm 2 mg/m3 Value	Form Respirable fraction. Respirable fraction. Respirable fraction. Form
Components CRISTOBALITE (CAS 14464-46-1) QUARTZ (SIO2) (CAS 14808-60-7) STODDARD SOLVENT (CAS 8052-41-3) TALC (CAS 14807-96-6) US. NIOSH: Pocket Guide t Components CRISTOBALITE (CAS 14464-46-1) QUARTZ (SIO2) (CAS 14808-60-7) STODDARD SOLVENT	Type TWA TWA TWA TWA TWA TWA to Chemical Hazards Type TWA	2.4 mppcf Value 0.025 mg/m3 0.025 mg/m3 100 ppm 2 mg/m3 Value 0.05 mg/m3	Form Respirable fraction. Respirable fraction. Respirable fraction. Form Respirable dust.
Components CRISTOBALITE (CAS 14464-46-1) QUARTZ (SIO2) (CAS 14808-60-7) STODDARD SOLVENT (CAS 8052-41-3) TALC (CAS 14807-96-6) US. NIOSH: Pocket Guide t Components CRISTOBALITE (CAS	Type TWA TWA TWA TWA TWA to Chemical Hazards Type TWA TWA	2.4 mppcf Value 0.025 mg/m3 0.025 mg/m3 100 ppm 2 mg/m3 Value 0.05 mg/m3 0.05 mg/m3	Form Respirable fraction. Respirable fraction. Respirable fraction. Form Respirable dust.

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Solid.

Physical state Liquid.

Form Liquid. Paste.
Color Brown. Grey.
Odor Solvent.
Odor threshold Not available.
pH Not available.

Melting point/freezing point -94 °F (-70 °C) estimated Initial boiling point and boiling 302 °F (150 °C) estimated

range

Flash point 114.8 °F (46.0 °C) estimated

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

riaiiiiiabiiity i

0.5 % estimated

Flammability limit - upper

er 6 % estimated

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 5 mm Hg estimated

Vapor densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 450 °F (232.22 °C) estimated

Decomposition temperature Not available. **Viscosity** Not available.

Other information

Density 1.36 g/cm3 estimated

Explosive properties Not explosive.

Flammability class Combustible II estimated

Oxidizing properties Not oxidizing.

Specific gravity 1.25 estimated

VOC < 150 g/l

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation.

Skin contact Causes skin irritation.

Eye contact Causes eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin

irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Not known.

Components Species Test Results

CRISTOBALITE (CAS 14464-46-1)

Acute Oral

LD50 Rat > 22500 mg/kg

Skin corrosion/irritation Causes skin irritation.
Serious eye damage/eye Causes eye irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

CRISTOBALITE (CAS 14464-46-1) 1 Carcinogenic to humans. QUARTZ (SIO2) (CAS 14808-60-7) 1 Carcinogenic to humans.

STODDARD SOLVENT (CAS 8052-41-3) 3 Not classifiable as to carcinogenicity to humans.

TALC (CAS 14807-96-6) 2B Possibly carcinogenic to humans.

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

CRISTOBALITE (CAS 14464-46-1)

QUARTZ (SIO2) (CAS 14808-60-7)

Cancer

Cancer

National Toxical and Program (NTP) Penart on Carcinogene

US. National Toxicology Program (NTP) Report on Carcinogens

CRISTOBALITE (CAS 14464-46-1) Known To Be Human Carcinogen.

Reasonably Anticipated to be a Human Carcinogen.

QUARTZ (SIO2) (CAS 14808-60-7) Known To Be Human Carcinogen.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity - Causes damage to organs through prolonged or repeated exposure.

repeated exposure

Aspiration hazard Not an aspiration hazard.

Chronic effectsCauses damage to organs through prolonged or repeated exposure. Prolonged inhalation may be

harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

STODDARD SOLVENT 3.16 - 7.15

Mobility in soil No data available.

Other adverse effects

The product contains volatile organic compounds which have a photochemical ozone creation

potential.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

product residues. This material and its container must be disposed of in a safe manner (see

Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

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

disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

CRISTOBALITE (CAS 14464-46-1)

QUARTZ (SIO2) (CAS 14808-60-7)

CRISTOBALITE (CAS 14464-46-1)

QUARTZ (SIO2) (CAS 14808-60-7)

lung effects

QUARTZ (SIO2) (CAS 14808-60-7)

CRISTOBALITE (CAS 14464-46-1) immune system effects QUARTZ (SIO2) (CAS 14808-60-7) immune system effects

CRISTOBALITE (CAS 14464-46-1) kidney effects QUARTZ (SIO2) (CAS 14808-60-7) kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No (Exempt)

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

California Proposition 65



WARNING: This product can expose you to QUARTZ (SIO2), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Inventory name

QUARTZ (SIO2) (CAS 14808-60-7) Listed: October 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

CRISTOBALITE (CAS 14464-46-1) QUARTZ (SIO2) (CAS 14808-60-7) STODDARD SOLVENT (CAS 8052-41-3) TALC (CAS 14807-96-6)

International Inventories

Country(s) or region

		· · · · · · · · · · · · · · · · · · ·
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No

Taiwan Taiwan Chemical Substance Inventory (TCSI) United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 09-November-2016 **Revision date** 25-July-2018

Version # 02

HMIS® ratings Health: 3*

Flammability: 3 Physical hazard: 0

Material name: BENTOSEAL SDS US

15784 Version #: 02 Revision date: 25-July-2018 Issue date: 09-November-2016

No

On inventory (yes/no)*

NFPA ratings

Health: 2 Flammability: 3 Instability: 0

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.

The information given is designed only as a 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 material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. CETCO, an MTI Company cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.