SAFETY DATA SHEET



1. Identification

Product identifier ULTRASEAL® AB

Other means of identification None.

Recommended use Not available.

Recommended restrictions Workers (and your customers or users in the case of resale) should be informed of the potential

presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required

under applicable regulations.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name CETCO, an MTI Company Address 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 Carcinogenicity Category 1A

Specific target organ toxicity, repeated

arget organ toxicity, repeated

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



exposure

Signal word Danger

Hazard statement 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 dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.

Category 1

Response If exposed or concerned: Get medical advice/attention.

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.

Supplemental information 74% of the mixture consists of component(s) of unknown acute oral toxicity. 100% of the mixture

consists of component(s) of unknown acute dermal toxicity. 26% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 2% of the mixture consists

of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Material name: ULTRASEAL® AB SDS US

Chemical name	Common name and synonyms	CAS number	%
ACRYLIC RESIN		9003-01-4	26
SODIUM ACRYLATE		7446-81-3	2
Other components below r	eportable levels		72

Constituents

Chemical name	Common name and synonyms	CAS number	%
QUARTZ (SIO2)		14808-60-7	<= 4.3
CRISTOBALITE		14464-46-1	<= 1.4

^{#:} This substance has been assigned Community workplace exposure limit(s).

Bentonite contains naturally occurring crystalline silica (not listed in Annex I of Directive **Composition comments**

67/548/EEC) in quantities less than 6%. Occupational Exposure Limits for constituents are listed in

Section 8.

4. First-aid measures

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Inhalation

Get medical attention, if needed.

Get medical attention if irritation develops or persists. No special measures required. Skin contact

Prolonged exposure may cause chronic effects.

Flush eyes immediately with large amounts of water. If irritation persists get medical attention. Eye contact Ingestion If ingestion of a large amount does occur, seek medical attention. No special measures required.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation.

Dry chemical, CO2, water spray or regular foam. Use any media suitable for the surrounding fires.

Symptoms may be delayed.

General information 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) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

None known.

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Material can be slippery when wet.

Fire fighting

equipment/instructions

Use water spray to cool unopened containers.

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

General fire hazards Not a fire hazard. No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Material can be slippery when wet. Wear appropriate protective equipment and clothing during clean-up. Wear a dust mask if dust is generated above exposure limits. 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 Avoid the generation of dusts during clean-up. This product is miscible in water. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Stop the flow of material, if this is without risk. Cover with plastic sheet to prevent spreading. Following product recovery, flush area with water. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS. Reduce airborne dust and prevent scattering by moistening with water.

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

Material name: ULTRASEAL® AB SDS US

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

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

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. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. In case of insufficient ventilation, wear suitable respiratory equipment. 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. No special restrictions on storage with other products. Store in original tightly closed container. Store in a dry place. Guard against dust accumulation of this material. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS). Keep in a cool, well-ventilated place.

8. Exposure controls/personal protection

Oc

Constituents	r Contaminants (29 CFR 1910. 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.
US. OSHA Table Z-3 (29 CFR 1910	0.1000)		
Constituents	Туре	Value	Form
TRADE SECRET	TWA	5 mg/m3	Respirable fraction
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction
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.
US. ACGIH Threshold Limit Value	es		
Constituents	Туре	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction
QUARTZ (SIO2) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction
US. NIOSH: Pocket Guide to Che	mical Hazards		
Constituents	Туре	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable dust.
QUARTZ (SIO2) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

Biological limit values Exposure guidelines

No biological exposure limits noted for the ingredient(s).

Some of the components of this product are hazardous in the respirable form. However, because of the physical nature of this product, dust generation is not expected.

Appropriate engineering controls

If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn. 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. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear dust goggles. Avoid contact with eyes. Eye wash fountain is recommended.

Material name: ULTRASEAL® AB

Skin protection

Hand protection Not normally needed. Wear appropriate chemical resistant gloves.

Use of an impervious apron is recommended. No special protective equipment required. Other

Respiratory protection Use a particulate filter respirator for particulate concentrations exceeding the Occupational

Exposure Limit.

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. Use good industrial hygiene practices in handling this material.

9. Physical and chemical properties

Appearance The product consists of bentonite granules between geotextile layers

Solid. Physical state **Form** Solid.

Color Not available. Not available. Odor **Odor threshold** Not available.

7 - 11 pН 7 - 11

842 °F (450 °C) estimated Melting point/freezing point

Not available.

Non-explosive

Not available.

Initial boiling point and boiling

range

Non-flammable Flash point **Evaporation rate** Not available. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Flammability limit - upper (%)

Explosive limit - lower (%)

Not available. Explosive limit - upper (%) Not available.

0.00004 hPa estimated Vapor pressure

Not available. Vapor density Not available. Relative density

Solubility(ies)

Solubility (water) Negligible Partition coefficient Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature Decomposition temperature** Not available. **Viscosity** Not available.

Other information

Explosive properties Not explosive. Oxidizing properties Not oxidizing. Percent volatile 0 % estimated

VOC CARB

10. Stability and reactivity

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

Stable at normal conditions. Chemical stability

Material name: ULTRASEAL® AB 5331 Version #: 10 Revision date: 02-March-2019 Issue date: 02-March-2019 Possibility of hazardous

reactions

Will not occur.

Conditions to avoid

None known. Contact with incompatible materials.

Incompatible materials

None known.

Hazardous decomposition

None known.

products

11. Toxicological information

Information on likely routes of exposure

InhalationNot available.Skin contactNot available.Eye contactNot available.IngestionNot available.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Not known.

Components Species Test Results

ACRYLIC RESIN (CAS 9003-01-4)

Acute Oral

LD50 Rat 2500 mg/kg

Constituents Species Test Results

CRISTOBALITE (CAS 14464-46-1)

Acute Oral

LD50 Rat > 22500 mg/kg

Skin corrosion/irritation Not available.

Serious eye damage/eye

irritation

Mild irritant to eyes (according to the modified Kay & Calandra criteria) Mild irritant to eyes

(according to the modified Kay & Calandra criteria)

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization According to the classification criteria of the European Union, the product is not considered as

being a skin irritant.

Germ cell mutagenicity Not available.

Carcinogenicity In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded

that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art,

worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer. Occupational exposure to respirable

dust and respirable crystalline silica should be monitored and controlled.

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.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

CRISTOBALITE (CAS 14464-46-1) Cancer QUARTZ (SIO2) (CAS 14808-60-7) Cancer 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 toxicity Not available.

Material name: ULTRASEAL® AB

Specific target organ toxicity -

single exposure

Not available.

Specific target organ toxicity -

repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

Not available.

Chronic effects

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.)

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003)

According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Some of the components of this product are hazardous in the respirable form. However, because of the physical nature of this product, dust generation is not expected.

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

12. Ecological information

Ecotoxicity This material is not expected to be harmful to aquatic life.

Test Results Components **Species**

ACRYLIC RESIN (CAS 9003-01-4)

Aquatic

LC50 Fish Fish 580 mg/L, 96 Hours

No data is available on the degradability of this product.

Persistence and degradability

No data available.

Bioaccumulative potential Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Material should be recycled if possible.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The 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:

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.

Material name: ULTRASEAL® AB 6/8

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly

Hazardous Process Safety Standard, 29 CFR 1910.119.

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

Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

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

lung effects

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

(SDWA)

Contains component(s) regulated under the Safe Drinking Water Act.

US state regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

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

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)

International Inventories

Material name: ULTRASEAL® AB

Country(s) or regionInventory nameOn inventory (yes/no)*AustraliaAustralian Inventory of Chemical Substances (AICS)No

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)NoCanadaNon-Domestic Substances List (NDSL)NoChinaInventory of Existing Chemical Substances in China (IECSC)NoEuropeEuropean Inventory of Existing Commercial ChemicalNo

Substances (EINECS)

Europe European List of Notified Chemical Substances (ELINCS) No
Japan Inventory of Existing and New Chemical Substances (ENCS) Yes
Korea Existing Chemicals List (ECL) No
New Zealand New Zealand Inventory No
Philippines Philippine Inventory of Chemicals and Chemical Substances

(PICCS)

Taiwan Taiwan Chemical Substance Inventory (TCSI)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

No

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

Issue date02-March-2019Revision date02-March-2019

Version # 10

Further information This safety datasheet only contains information relating to safety and does not replace any product

information or product specification.

HMIS® ratings Health: 3*

Flammability: 0 Physical hazard: 0

NFPA ratings Health: 2

Flammability: 0 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 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 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.

Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier. 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 Product and Company Identification: Alternate Trade Names

GHS: Classification

Material name: ULTRASEAL® AB SDS US

^{*}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).