# SAFETY DATA SHEET



### 1. Identification

Product identifier VOLTEX® DS CR

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

Category 1

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

Supplier Not available.

2. Hazard identification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1A

Specific target organ toxicity, repeated

exposure

Environmental hazards Not classified.

Label elements



Signal word Danger

Hazard statement May cause cancer. Causes damage to organs through prolonged or repeated exposure.

**Precautionary statement** 

**Prevention** Keep out of reach of children. Read label before use. 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.

**Response** If medical advice is needed, have product container or label at hand. IF exposed or concerned:

Get medical advice/attention. Specific treatment (see on this label).

Storage Store locked up. Store away from incompatible materials.

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

Other hazards None known.

Supplemental information 6% of the mixture consists of component(s) of unknown acute oral toxicity. 8% of the mixture

consists of component(s) of unknown acute dermal toxicity. 8% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 8% 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	%
SILICA, CRYSTALLINE, QUARTZ	, -	14808-60-7	6
SILICA, CRYSTALLINE, CRISTOBALITE		14464-46-1	2
Other components below reportable levels			92

DSD: Directive 67/548/EEC. CLP: Regulation No. 1272/2008.

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

M: M-factor

PBT: persistent, bioaccumulative and toxic substance. vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. \*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

**Composition comments** 

This product contains naturally occurring crystalline silica (not listed in Annex I of Directive

67/548/EEC) in quantities less than 6%.

## 4. First-aid measures

Inhalation Move to fresh air. If symptoms are experienced, remove source of contamination or move victim to

fresh air. If the affected person is not breathing, apply artificial respiration. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper

respiratory medical device. Call a physician if symptoms develop or persist.

Remove and isolate contaminated clothing and shoes. Get medical attention if irritation develops Skin contact

or persists. For minor skin contact, avoid spreading material on unaffected skin. No special

Rinse mouth thoroughly. If ingestion of a large amount does occur, seek medical attention. If

measures required.

attendance.

None known.

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if Eye contact

irritation develops or persists. Continue rinsing.

ingestion of a large amount does occur, call a poison control center immediately. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way

valve or other proper respiratory medical device. No special measures required.

Direct contact with eyes may cause temporary irritation. Prolonged exposure may cause chronic

Most important

symptoms/effects, acute and delayed

Ingestion

Indication of immediate medical attention and special treatment needed

**General information** 

effects.

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

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. Show this safety data sheet to the doctor in

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

## 5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

During fire, gases hazardous to health may be formed.

Specific hazards arising from the chemical

Special protective equipment

and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH

(approved or equivalent) and full protective gear. Use water spray to cool unopened containers.

Fire fighting equipment/instructions

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. Wear appropriate protective equipment and clothing during clean-up. Wear a dust mask if dust is generated above exposure limits. 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

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. Following product recovery, flush area with water. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS. None necessary. Reduce airborne dust and prevent scattering by moistening with water.

**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. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. 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. No special storage conditions required. 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).

## 8. Exposure controls/personal protection

**US. ACGIH Threshold Limit Values** 

### Occupational exposure limits

Components	Туре	Value	Form
SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Canada. Alberta OELs (Occupation	nal Health & Safety Code, Scl	•	
Components	Туре	Value	Form
SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable.
		0.025 mg/m3	Respirable particles.
SILICA, CRYSTALLINE,	TWA	0.025 mg/m3	Respirable particles
QUARTZ (CAS 14808-60-7)			
QUARTZ (CAS 14808-60-7)  Canada. British Columbia OELs. ( Safety Regulation 296/97, as amen		s for Chemical Substances, Oc	ccupational Health and
Canada. British Columbia OELs. (		s for Chemical Substances, Od Value	ccupational Health and
Canada. British Columbia OELs. (6 Safety Regulation 296/97, as amen	ided)		•
Canada. British Columbia OELs. (6 Safety Regulation 296/97, as amen Components SILICA, CRYSTALLINE, CRISTOBALITE (CAS	ded) Type	Value	Form
Canada. British Columbia OELs. (6 Safety Regulation 296/97, as amen Components SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) SILICA, CRYSTALLINE,	Type TWA	Value 0.025 mg/m3 0.025 mg/m3	Form Respirable fraction.
Canada. British Columbia OELs. (6 Safety Regulation 296/97, as amen Components SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	Type TWA	Value 0.025 mg/m3 0.025 mg/m3	Form Respirable fraction.
Canada. British Columbia OELs. (Cafety Regulation 296/97, as amen Components  SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)  Canada. Manitoba OELs (Reg. 217	Type TWA TWA  /2006, The Workplace Safety	Value  0.025 mg/m3  0.025 mg/m3  And Health Act)	Form  Respirable fraction.  Respirable fraction.

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) **Form** Components Value Type SILICA, CRYSTALLINE, TWA 0.05 mg/m3 Respirable fraction. CRISTOBALITE (CAS 14464-46-1) SILICA, CRYSTALLINE, **TWA** 0.1 mg/m3 Respirable fraction. QUARTZ (CAS 14808-60-7) Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety) Components Value **Form** Type **TWA** SILICA, CRYSTALLINE. 0.05 ma/m3 Respirable dust.

SILICA, CRYSTALLINE,
CRISTOBALITE (CAS
14464-46-1)
SILICA, CRYSTALLINE,
QUARTZ (CAS 14808-60-7)

TWA

0.05 mg/m3
Respirable dust.

0.1 mg/m3
Respirable dust.

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) Components Type Value **Form** SILICA, CRYSTALLINE, Inhalable fraction. 15 minute 10 mg/m3 CRISTOBALITE (CAS 14464-46-1) 8 hour 0.05 mg/m3 Respirable fraction. SILICA, CRYSTALLINE. 8 hour 0.05 mg/m3 Respirable fraction. QUARTZ (CAS 14808-60-7)

**Biological limit values**No biological exposure limits noted for the ingredient(s).

Exposure guidelines Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica

should be monitored and controlled.

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.

Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

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

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. Eye wash fountain is recommended. Use good industrial hygiene practices in handling this material.

## 9. Physical and chemical properties

Appearance The product consists of bentonite granules between geotextile layers

Physical state Solid.

Form Solid. Mat or Fabric

ColorVarious.OdorNone.

Odor threshold Not available.

PH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling

range

Not available.

Not flammable

Flash point **Evaporation rate** Not available. Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not explosive

Flammability limit - upper

Not explosive

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

0.00001 hPa estimated Vapor pressure

Vapor density Not available. Relative density Not available.

Solubility(ies)

Solubility (water) Negligible Partition coefficient Not available.

(n-octanol/water)

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

Other information

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

## 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** 

Possibility of hazardous

reactions

Will not occur.

Conditions to avoid None known. Contact with incompatible materials.

Powerful oxidizers. Chlorine. None known. Incompatible materials

Hazardous decomposition

products

None known.

## 11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected. Direct contact with eyes may cause temporary irritation. Eye contact

Ingestion May cause discomfort if swallowed. Expected to be a low ingestion hazard. However, ingestion is

not likely to be a primary route of occupational exposure.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation. Exposure may cause temporary irritation,

redness, or discomfort.

Information on toxicological effects

**Acute toxicity** Not known.

Components Species Test Results

SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)

Acute Oral

LD50 Rat > 22500 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

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

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

SILICA, CRYSTALLINE, CRISTOBALITE Irritant

(CAS 14464-46-1)

**Respiratory sensitization** Not a respiratory sensitizer.

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

being a skin irritant.

Germ cell mutagenicity

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

mutagenic or genotoxic.

Carcinogenicity 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

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. May cause cancer. Occupational exposure to respirable dust and

respirable crystalline silica should be monitored and controlled.

**ACGIH Carcinogens** 

SILICA, CRYSTALLINE, CRISTOBALITE A2 Suspected human carcinogen.

(CAS 14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) A2 Suspected human carcinogen.

Canada - Alberta OELs: Carcinogen category

SILICA, CRYSTALLINE, CRISTOBALITE Suspected human carcinogen.

(CAS 14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Suspected human carcinogen.

Canada - Manitoba OELs: carcinogenicity

SILICA, CRYSTALLINE, CRISTOBALITE Suspected human carcinogen.

(CAS 14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

Suspected human carcinogen.

Canada - Quebec OELs: Carcinogen category

SILICA, CRYSTALLINE, CRISTOBALITE Detected carcinogenic effect in animals.

(CAS 14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Suspected carcinogenic effect in humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

SILICA, CRYSTALLINE, CRISTOBALITE 1 Carcinogenic to humans.

(CAS 14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) 1 Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

SILICA, CRYSTALLINE, CRISTOBALITE Known To Be Human Carcinogen.

(CAS 14464-46-1)

Reasonably Anticipated to be a Human Carcinogen.

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Known To Be Human Carcinogen.

**Reproductive toxicity**This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** 

Not an aspiration hazard.

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. Prolonged exposure may cause chronic effects. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

## 12. Ecological information

**Ecotoxicity** This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms

and aquatic systems.

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

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

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.

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

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).

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

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

disposal.

## 14. Transport information

**TDG** 

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

**IMDG** 

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not applicable.

the IBC Code

## 15. Regulatory information

#### Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

### **Controlled Drugs and Substances Act**

Not regulated.

### Export Control List (CEPA 1999, Schedule 3)

Not listed.

#### **Greenhouse Gases**

Not listed.

### **Precursor Control Regulations**

Not regulated.

### International regulations

#### **Stockholm Convention**

Not applicable.

#### **Rotterdam Convention**

Not applicable.

### **Kyoto protocol**

Not applicable.

#### **Montreal Protocol**

Not applicable.

## **Basel Convention**

Not applicable.

Country(s) or region

#### International Inventories

Australia

Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances	Yes

Australian Inventory of Chemical Substances (AICS)

**Inventory name** 

Taiwan Chemical Substance Inventory (TCSI)

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

### 16. Other information

Issue date01-May-2020Revision date01-May-2020

Version # 04

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

information or product specification.

References ACGIH

EPA: AQUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

Material name: VOLTEX® DS CR SDS CANADA

On inventory (yes/no)\*

Yes

<sup>(</sup>PICCS)

<sup>\*</sup>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).

#### 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