# SAFETY DATA SHEET

## 1. Identification

**Product identifier** **VOLTEX® DS**

**Other means of identification** None.

**Recommended use of the chemical and restrictions on use**

**Recommended use** Not available.

**Restrictions on use** Not available.

**Details of manufacturer or importer**

**Manufacturer**

**Company name** CETCO Australia, an MTI Company

**Address** 50 Crowle Street
North Geelong, VIC 3215
Australia

**Telephone** General Information +61 03 5272 1090

**Website** http://www.volclay.com.au/

**E-mail** safetydata@mineralstech.com

**Emergency phone number** .

**Asia Pacific** 1 760 476 3960

**Australia** 61 1 800 686 951

## 2. Hazard(s) identification

**Classification of the hazardous chemical**

**Physical hazards** Not classified.

**Health hazards** Not classified.

**Environmental hazards** Not classified.

**Label elements, including precautionary statements**

**Hazard symbol(s)** None.

**Signal word** None.

**Hazard statement(s)** The mixture does not meet the criteria for classification.

**Precautionary statement(s)**

**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. Use personal protective equipment as required. Not applicable.

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

**Storage** Store in accordance with local/regional/national/international regulation. Store locked up.

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

**Other hazards which do not result in classification** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

**Mixture**

**Impurities**

| Identity of chemical ingredients | CAS number and other unique identifiers | Concentration of ingredients |
|---|---|---|
| Quartz | 14808-60-7 | |
| Crystalline silica, quartz<br>SILICA (QUARTZ) | | |

#: This substance has workplace exposure limit(s).
vPvB: very persistent and very bioaccumulative substance.
PBT: persistent, bioaccumulative and toxic substance.

| | |
|---|---|
| **Composition comments** | Occupational Exposure Limits for impurities are listed in Section 8. This product contains naturally occurring crystalline silica (not listed in Annex I of Directive 67/548/EEC) in quantities less than 5%. |

## 4. First-aid measures

**Description of necessary first aid measures**

| | |
|---|---|
| **Inhalation** | Move to fresh air. If symptoms are experienced, remove source of contamination or move victim to fresh air. Call a physician if symptoms develop or persist. |
| **Skin contact** | IF ON SKIN: Gently wash with plenty of soap and water. Get medical attention if irritation develops and persists. |
| **Eye contact** | Flush eyes immediately with large amounts of water. |
| **Ingestion** | Rinse mouth thoroughly. If ingestion of a large amount does occur, call a poison control centre 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. |
| **Personal protection for first-aid responders** | 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 attendance. |
| **Symptoms caused by exposure** | Direct contact with eyes may cause temporary irritation. |
| **Medical attention and special treatment** | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. |

## 5. Fire-fighting measures

**Extinguishing media**

| | |
|---|---|
| **Suitable extinguishing media** | Water Fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Use any media suitable for the surrounding fires. |
| **Unsuitable extinguishing media** | Do not use water jet as an extinguisher, as this will spread the fire. |
| **Specific hazards arising from the chemical** | Not available. |
| **Special protective equipment and precautions for fire fighters** | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Material can be slippery when wet. |
| **Fire fighting equipment/instructions** | Use water spray to cool unopened containers. |
| **Hazchem Code** | None. |
| **General fire hazards** | No unusual fire or explosion hazards noted. |
| **Specific methods** | Use standard firefighting procedures and consider the hazards of other involved materials. |

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

| | |
|---|---|
| **For non-emergency personnel** | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Material can be slippery when wet. Wear a dust mask if dust is generated above exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained. |
| **For emergency responders** | Keep unnecessary personnel away. |
| **Environmental precautions** | Do not contaminate water. |
| **Methods and materials for containment and cleaning up** | This product is miscible in water. Should not be released into the environment. Avoid the generation of dusts during clean-up. Prevent product from entering drains. Following product recovery, flush area with water. Sweep up or vacuum up spillage and collect in suitable container for disposal. Small Dry Spills: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area. Reduce airborne dust and prevent scattering by moistening with water. |
| **Other issues relating to spills and releases** | Clean up in accordance with all applicable regulations. |

## 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. In case of insufficient ventilation, wear suitable respiratory equipment. Use personal protective equipment as required. Avoid release to the environment.

**Conditions for safe storage, including any incompatibilities**

Store locked up. No special restrictions on storage with other products. Store in original tightly closed container. Guard against dust accumulation of this material. No special storage conditions required Keep out of the reach of children.

## 8. Exposure controls and personal protection

**Control parameters**

Follow standard monitoring procedures.

**Occupational exposure limits**

**Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)**

| Impurities | Type | Value | Form |
|---|---|---|---|
| Quartz (CAS 14808-60-7) | TWA | 0.1 mg/m3 | Respirable dust. |

**Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)**

| Impurities | Type | Value |
|---|---|---|
| Quartz (CAS 14808-60-7) | TWA | 0.1 mg/m3 |

**US. ACGIH Threshold Limit Values**

| Impurities | Type | Value | Form |
|---|---|---|---|
| Quartz (CAS 14808-60-7) | TWA | 0.025 mg/m3 | Respirable fraction. |

**UK. EH40 Workplace Exposure Limits (WELs)**

| Impurities | Type | Value | Form |
|---|---|---|---|
| INERT OR NUISANCE DUSTS | TWA | 4 mg/m3 | Respirable dust. |
| | | 10 mg/m3 | Inhalable dust. |
| Quartz (CAS 14808-60-7) | TWA | 0.1 mg/m3 | Respirable. |

**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)**

| Impurities | Type | Value | Form |
|---|---|---|---|
| INERT OR NUISANCE DUSTS | TWA | 4 mg/m3 | Inhalable dust. |
| | | 0.3 mg/m3 | Respirable dust. |

**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 these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn. 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, for example personal protective equipment (PPE)**

**Eye/face protection**

Wear dust goggles.

**Skin protection**

**Hand protection**

Not normally needed. Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other**

Use personal protective equipment as required.

**Respiratory protection**

Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

| | |
|---|---|
| **Hygiene measures** | Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practices. 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 |
| **Colour** | Various. |
| **Odour** | None. |
| **Odour threshold** | Not available. |
| **pH** | Not available. |
| **Melting point/freezing point** | Not available. |
| **Initial boiling point and boiling range** | Not available. |
| **Flash point** | Not flammable |
| **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. |
| **Vapour pressure** | 0.00004 hPa estimated |
| **Vapour density** | Not available. |
| **Relative density** | Not available. |
| **Solubility(ies)** | |
| **Solubility (water)** | Negligible |
| **Partition coefficient (n-octanol/water)** | Not available. |
| **Auto-ignition temperature** | Not available. |
| **Decomposition temperature** | Not available. |
| **Viscosity** | Not available. |
| **Other physical and chemical parameters** | |
| **Explosive properties** | Not explosive. |
| **Oxidising properties** | Not oxidising. |
| **Percent volatile** | 0 % estimated |
| **VOC** | 0 % estimated |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| **Chemical stability** | Stable at normal conditions. |
| **Possibility of hazardous reactions** | Will not occur. Hazardous polymerisation does not occur. |
| **Conditions to avoid** | None known. Contact with incompatible materials. |
| **Incompatible materials** | None known. |
| **Hazardous decomposition products** | None known. |

## 11. Toxicological information

**Information on possible routes of exposure**

| | |
|---|---|
| **Inhalation** | No adverse effects due to inhalation are expected. |
| **Skin contact** | No adverse effects due to skin contact are expected. |
| **Eye contact** | Direct contact with eyes may cause temporary irritation. |
| **Ingestion** | Expected to be a low ingestion hazard. |
| **Symptoms related to exposure** | Direct contact with eyes may cause temporary irritation. |

**Acute toxicity**

**Toxicological data**

| Impurities | Species | Test results |
|---|---|---|
| Quartz (CAS 14808-60-7) | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | 500 mg/kg |

* Estimates for product may be based on additional component data not shown.

| | |
|---|---|
| **Skin corrosion/irritation** | Prolonged skin contact may cause temporary irritation. |
| **Serious eye damage/irritation** | None known. Mild irritant to eyes (according to the modified Kay & Calandra criteria) |
| **Respiratory or skin sensitisation** | |
| **Respiratory sensitisation** | Not a respiratory sensitizer. |
| **Skin sensitisation** | None known. 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** | May cause cancer. 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. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Not classifiable as to carcinogenicity to humans. |

**ACGIH Carcinogens**

| | |
|---|---|
| Quartz (CAS 14808-60-7) | A2 Suspected human carcinogen. |

**IARC Monographs. Overall Evaluation of Carcinogenicity**

| | |
|---|---|
| Quartz (CAS 14808-60-7) | 1 Carcinogenic to humans. |

| | |
|---|---|
| **Reproductive toxicity** | Contains no ingredient listed as toxic to reproduction |
| **Specific target organ toxicity - single exposure** | Not classified. |
| **Specific target organ toxicity - repeated exposure** | Not classified. |
| **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. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

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.

**Persistence and degradability** Not established.

**Bioaccumulative potential** Not established.

**Mobility in soil** This product is miscible in water. Not established.

**Other adverse effects** Not established.

## 13. Disposal considerations

**Disposal methods** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. Material should be recycled if possible.

**Residual waste** 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. Offer rinsed packaging material to local recycling facilities.

## 14. Transport information

**ADG**

Not regulated as dangerous goods.

**RID**

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 the IBC Code** Not available.

## 15. Regulatory information

**Safety, health and environmental regulations**

**National regulations** This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals (23/12/2011).

**Australia Medicines & Poisons Appendix A**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix B**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix D**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix E**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix F**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix G**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix H**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix I**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix J**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix K**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 10**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 2**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 3**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 4**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 5**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 6**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 7**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 8**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 9**

Poisons schedule number not allocated.

**High Volume Industrial Chemicals (HVIC)**

| | |
|---|---|
| Quartz (CAS 14808-60-7) | 100000 - 999999 TONNES See the regulation for additional information. |

**Importation of Ozone Deleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)**

Not listed.

**National Pollutant Inventory (NPI) substance reporting list**

| | |
|---|---|
| INERT OR NUISANCE DUSTS (CAS SEQ250) | 2000 TONNES/YR Threshold Category: 2B<br>400 TONNES/YR Threshold Category: 2A |

**Prohibited Carcinogenic Substances**

Not regulated.

**Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)**

Not listed.

**Resricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)**

Not listed.

**Restricted Carcinogenic Substances**

Not regulated.

**International regulations**

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product does not need to be labelled in accordance with EC directives or respective national laws.

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| 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 (PICCS) | Yes |
| Taiwan | Taiwan Toxic Chemical Substances (TCS) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*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

**Issue date** 23-March-2018

**Revision date** 23-March-2018

**Further information** This safety datasheet only contains information relating to safety and does not replace any product information or product specification. HMIS® is a registered trade and service mark of the NPCA.

**References** EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents

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**Revision information** Product and Company Identification: Alternate Trade Names