



SAFETY DATA SHEET

Section 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name or designation of the mixture VOLSEAL® 200

Registration number -

Synonyms None.

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Revision date 17-May-2011

Supersedes date 29-July-2009

Relevant identified uses of the substance or mixture and uses advised against

Identified uses Not available.

Uses advised against 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.

Details of the supplier of the safety data sheet

Supplier

Company name CETCO Europe
Address Omøgade 8, st.
DK-2100 København Ø
DK
Telephone General Information +45 36 30 10 50
e-mail safety.data@amcol.com
Contact person EHS Department

Emergency telephone number Emergency +1 (703) 527-3887

Section 2: Hazards identification

Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification Xn;R20/21/22, Xi;R36/37/38, R43-66

The full text for all R-phrases is displayed in section 16.

Hazard summary

Physical hazards Not classified for physical hazards.

Health hazards Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. Repeated exposure may cause skin dryness or cracking. Occupational exposure to the substance or mixture may cause adverse health effects.

Environmental hazards Not classified for hazards to the environment.

Specific hazards Harmful by inhalation, in contact with skin and if swallowed. Irritating to mouth, throat, and stomach. Prolonged exposure may cause chronic effects.

Main symptoms Oedema. Proteinuria. Irritating to mouth, throat, and stomach.

Label elements

Label according to Directive 67/548/EEC or 1999/45/EC as amended

Contains: PORTLAND CEMENT, Quartz

EC label The product does not need to be labelled in accordance with EC directives or respective national laws.



Harmful

R-phrases

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R43 May cause sensitization by skin contact.
R66 Repeated exposure may cause skin dryness or cracking.

S-phrases

S1/2 Keep locked up and out of the reach of children.
S13 Keep away from food, drink and animal feeding stuffs.
S20 When using do not eat or drink.
S22 Do not breathe dust.
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37 Wear suitable protective clothing and gloves.
S64 If swallowed, rinse mouth with water (only if the person is conscious).

Supplemental label information

Not applicable

Other hazards

Not assigned.

Section 3: Composition/information on ingredients

Mixture

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
PORTLAND CEMENT	40 - 60	65997-15-1 266-043-4	-	-	#
Classification:	Xn;R20/21/22, Xi;R36/37/38, R66-43				
Quartz	40 - 60	14808-60-7 238-878-4	-	-	#
Classification:	Xn;R22				
Sodium carbonate	2.5 - 10	497-19-8 207-838-8	-	011-005-00-2	
Classification:	Xi;R36				

Other components below reportable levels 2.5 - 10

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

Composition comments

Occupational Exposure Limits for constituents are listed in Section 8. The full text for all R-phrases is displayed in Section 16.

Section 4: First aid measures

General information

Take off contaminated clothing and shoes immediately. If you feel unwell, seek medical advice (show the label where possible). In case of shortness of breath, give oxygen. Keep victim warm. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Description of 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. Get medical attention immediately.

Skin contact

Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Get medical attention if irritation develops or persists. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse. No special measures required.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists. Get medical attention immediately.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. If swallowed, rinse mouth with water (only if the person is conscious). Never give anything by mouth to a victim who is unconscious or is having convulsions. If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting without advice from poison control centre. 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.

Most important symptoms and effects, both acute and delayed

Not available.

Indication of any immediate medical attention and special treatment needed

Oxygen, if needed. Keep victim warm. Symptoms may be delayed. Provide general supportive measures and treat symptomatically.

Section 5: Firefighting measures

General fire hazards

Not available.

Extinguishing media

Suitable extinguishing media

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

Inappropriate extinguishing media

Not available.

Special hazards arising from the substance or mixture

Not available.

Advice for firefighters

Special protective equipment for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Special firefighting procedures

In the event of fire, cool tanks with water spray. Material can be slippery when wet.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them. Wear a dust mask if dust is generated above exposure limits. Material can be slippery when wet. Forms smooth, slippery surfaces on floors, posing an accident risk.

For emergency responders

Not available.

Environmental precautions

Prevent further leakage or spillage if safe to do so. No special environmental precautions required

Methods and material for containment and cleaning up

This product is miscible in water. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Avoid the generation of dusts during clean-up. Following product recovery, flush area with water. None necessary. Reduce airborne dust and prevent scattering by moistening with water.

Reference to other sections

For waste disposal, see section 13.

Section 7: Handling and storage

Precautions for safe handling

Minimise dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid contact with skin. Avoid contact with eyes. In case of insufficient ventilation, wear suitable respiratory equipment.

Avoid prolonged exposure. When using do not eat or drink. Material can be slippery when wet. Forms smooth, slippery surfaces on floors, posing an accident risk.

Conditions for safe storage, including any incompatibilities

Keep locked up. No special restrictions on storage with other products. No special storage conditions required Guard against dust accumulation of this material. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

Specific end use(s)

Not available.

Section 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
PORTLAND CEMENT (65997-15-1)	TWA	4.0000 mg/m ³	Respirable dust.
Quartz (14808-60-7)	TWA	10.0000 mg/m ³ 0.1000 mg/m ³	Inhalable dust. Respirable.
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Recommended monitoring procedures	Follow standard monitoring procedures.		
DNEL	Not available.		
PNEC	Not available.		
Exposure controls			
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, such as personal protective equipment			
General information	Not available.		
Eye/face protection	Avoid contact with eyes. Wear dust goggles.		
Skin protection			
- Hand protection	Wear protective gloves.		
- Other	Avoid contact with the skin. Wear chemical protective equipment that is specifically recommended by the manufacturer. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.		
Respiratory protection	In the case of respirable dust, use self-contained breathing apparatus.		
Thermal hazards	Not available.		
Hygiene measures	When using, do not eat, drink or smoke. Wash hands after handling. Eye wash fountain is recommended. Use good industrial hygiene practices in handling this material.		
Environmental exposure controls	No special measures required.		

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid.
Form	Solid. Various.
Color	Various.
Odor	None.
Odor threshold	Not available.
pH	Not applicable
Melting point/freezing point	851 °C (1563.8 °F) estimated
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Flammability (solid, gas)	Not available.
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Oxidising properties	Not applicable
Explosive properties	Not applicable
Explosive limit	Not applicable
Vapor pressure	0 hPa estimated

Vapor density	Not applicable
Evaporation rate	Not applicable
Relative density	Not available.
Density	0.189727 g/cm ³ estimated
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
VOC (Weight%)	0 % estimated
Percent volatile	0 % estimated
Other data	
Specific gravity	0.189746 estimated
Other information	No relevant additional information available.

Section 10: Stability and reactivity

Reactivity	None known.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Will not occur.
Conditions to avoid	None known.
Incompatible materials	Powerful oxidizers. Chlorine. None known.
Hazardous decomposition products	None known.

Section 11: Toxicological information

General information	Not available.
Information on likely routes of exposure	
Ingestion	Harmful if swallowed.
Inhalation	Harmful by inhalation.
Skin contact	Harmful in contact with skin. Irritating to skin.
Eye contact	Irritating to eyes.
Symptoms	Oedema. Proteinuria.

Information on toxicological effects

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

Product	Test results
VOLSEAL® 200 (Mixture)	Acute Inhalation LC50 Guinea pig: 10.6667 mg/l estimated Acute Inhalation LC50 Mouse: 16 mg/l estimated Acute Inhalation LC50 Rat: 30.6667 mg/l estimated Acute Oral LD50 Rat: 1088.92 mg/kg estimated Acute Other LD50 Mouse: 1554.67 mg/kg estimated
Components	Test results
Quartz (14808-60-7)	Acute Oral LD50 Rat: 500 mg/kg
Sodium carbonate (497-19-8)	Acute Inhalation LC50 Guinea pig: 0.8 mg/l 2.00 Hours Acute Inhalation LC50 Mouse: 1.2 mg/l 2.00 Hours Acute Inhalation LC50 Rat: 2.3 mg/l 2.00 Hours Acute Oral LD50 Rat: 4090 mg/kg Acute Other LD50 Mouse: 116.6 mg/kg 30.00 Days

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

Skin corrosion/irritation	Irritating to skin.
Serious eye damage/eye irritation	Irritating to eyes. Mild irritant to eyes (according to the modified Kay & Calandra criteria)
Respiratory sensitization	Not available.

Skin sensitization	May cause sensitisation by skin contact. 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 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. Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

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

Reproductive toxicity	Not available.
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Not available.
Aspiration hazard	Not available.
Mixture versus substance information	Not available.
Other information	Not available.

Section 12: Ecological information

Toxicity

Product	Test results
VOLSEAL® 200 (Mixture)	EC50 Daphnia: 2088 mg/l 48.00 hours estimated LC50 Fish: 8600 mg/l 96.00 hours estimated
Components	Test results
Sodium carbonate (497-19-8)	EC50 Daphnia: 264 mg/l 48.00 Hours EC50 Water flea (Ceriodaphnia dubia): 156.6 - 298.9 mg/l 48.00 hours LC50 Bluegill (Lepomis macrochirus): 300 mg/l 96.00 hours LC50 Fish: 300 mg/l 96.00 Hours

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

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	Not available.
Mobility	Not available.
Environmental fate - Partition coefficient	Not available.
Mobility in soil	Not available.
Results of PBT and vPvB assessment	Not available.
Other adverse effects	Not available.

Section 13: Disposal considerations

Waste treatment methods

Residual waste	Not available.
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Material name: VOLSEAL® 200

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Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. Waste codes should be assigned by the user based on the application for which the product was used.
Disposal methods/information	This material and its container must be disposed of as hazardous waste. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Dispose in accordance with all applicable regulations. Material should be recycled if possible.

Section 14: Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

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 No information available.

Section 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulations

Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Registry (EPER)

Not listed.

Regulation (EC) No. 1907/2006, Article 59(1). Candidate List

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work.

Chemical safety assessment

No Chemical Safety Assessment has been carried out.

Section 16: Other information

List of abbreviations Not available.

References Not available.

Information on evaluation method leading to the classification of mixture Not available.

Wording of the R-phrases in sections 2 and 3

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R22 Harmful if swallowed.
R36 Irritating to eyes.
R36/37/38 Irritating to eyes, respiratory system and skin.
R43 May cause sensitization by skin contact.
R66 Repeated exposure may cause skin dryness or cracking.

Revision information

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

Training information

Not available.

Issued by

EHS Department

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