



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name COREFLEX® 45
Version # 09
Revision date 24-February-2011
CAS # Mixture
Manufacturer information CETCO
Building Materials Group
2870 Forbs Avenue
Hoffman Estates, IL 60192 US
safety.data@amcol.com
http://www.cetco.com/
General Information (800) 527-9948
CHEMTREC® (800) 424-9300

2. Hazards Identification

Emergency overview 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.

Potential health effects

Routes of exposure Inhalation.

Eyes Dust or powder may irritate eye tissue.

Skin Non-irritating to the skin.

Inhalation 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. For additional information on inhalation hazards, see Section 11 of this safety data sheet.

Ingestion No significant adverse effects are expected upon ingestion of the product.

Target organs Lungs.

Chronic effects 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. Overexposure to dust may result in pneumoconiosis, a respiratory disease caused by inhalation of mineral dust, which can lead to fibrotic changes to the lung tissue, or silicosis, a respiratory disease caused by inhalation of silica dust, which can lead to inflammation and fibrosis of the lung tissue.

3. Composition / Information on Ingredients

Components	CAS #	Percent
POLYVINYLCHLORIDE	9002-86-2	20 - 40

Composition comments This product contains naturally occurring crystalline silica (not listed in Annex I of Directive 67/548/EEC) in quantities less than 1%.

4. First Aid Measures

First aid procedures

Eye contact Flush eyes immediately with large amounts of water. If irritation persists get medical attention.

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

Inhalation Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get medical attention, if needed.

Ingestion No special measures required. If ingestion of a large amount does occur, seek medical attention.

Notes to physician Provide general supportive measures and treat symptomatically.

5. Fire Fighting Measures

Flammable properties None known.

Extinguishing media

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

Fire fighting equipment/instructions	Not available.
Hazardous combustion products	None known.

6. Accidental Release Measures

Personal precautions	Wear a dust mask if dust is generated above exposure limits.
Environmental precautions	No special environmental precautions required.
Methods for cleaning up	Avoid the generation of dusts during clean-up. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Reduce airborne dust and prevent scattering by moistening with water.

7. Handling and Storage

Handling	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.
Storage	Guard against dust accumulation of this material. Keep in a cool, well-ventilated place. No special restrictions on storage with other products.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components	Type	Value	Form
POLYVINYLCHLORIDE (9002-86-2)	TWA	1.0000 mg/m3	Respirable fraction.
Impurities	Type	Value	Form
INERT OR NUISANCE DUST (SEQ250)	TWA	10.0000 mg/m3	Inhalable particles.
		3.0000 mg/m3	Respirable particles.
QUARTZ (14808-60-7)	TWA	0.0250 mg/m3	Respirable fraction.

U.S. - OSHA

Components	Type	Value	Form
POLYVINYLCHLORIDE (9002-86-2)	STEL	5.0000 ppm	
	TWA	1.0000 ppm	
Impurities	Type	Value	Form
INERT OR NUISANCE DUST (SEQ250)	PEL	15.0000 mg/m3	Total dust.
		5.0000 mg/m3	Respirable fraction.
	TWA	15.0000 mg/m3	Total dust.
		15.0000 mppcf	Respirable fraction.
		5.0000 mg/m3	Respirable fraction.
		50.0000 mppcf	Total dust.
QUARTZ (14808-60-7)	TWA	0.3000 mg/m3	Total dust.
		0.1000 mg/m3	Respirable dust.
		2.4000 mppcf	Respirable.
		0.1000 mg/m3	Respirable.

Exposure guidelines	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.
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Engineering controls	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. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn.
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Personal protective equipment

Eye / face protection	Avoid contact with eyes. Wear dust goggles. Eye wash fountain is recommended.
Skin protection	No special protective equipment required.
Respiratory protection	Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.
General hygiene considerations	Use good industrial hygiene practices in handling this material.

9. Physical & Chemical Properties

Appearance	The product consists of bentonite granules between geotextile layers
Color	Not available.
Odor	Not available.

Odor threshold	Not available.
Physical state	Not available.
Form	Solid.
pH	7 - 11
Melting point/Freezing point	Not available.
Boiling point	Not available.
Flash point	Non-flammable
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Non-explosive
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Relative density	0.3515 lb/cu ft estimated
Solubility (water)	Negligible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	Not available.

10. Chemical Stability & Reactivity Information

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

11. Toxicological Information

Toxicological data

Impurities

Test Results

QUARTZ (14808-60-7)

Acute Oral LD50 Rat: 500 mg/kg

Chronic effects

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.

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

Carcinogenicity

ACGIH Carcinogens

POLYVINYLCHLORIDE (CAS 9002-86-2)

A4 Not classifiable as a human carcinogen.

QUARTZ (CAS 14808-60-7)

A2 Suspected human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

POLYVINYLCHLORIDE (CAS 9002-86-2)

3 Not classifiable as to carcinogenicity to humans.

QUARTZ (CAS 14808-60-7)

1 Carcinogenic to humans.

US NTP Report on Carcinogens: Known carcinogen

QUARTZ (CAS 14808-60-7)

Known carcinogen.

US OSHA Specifically Regulated Substances: Potential cancer hazard

POLYVINYLCHLORIDE (CAS 9002-86-2)

Potential cancer hazard.

12. Ecological Information

Ecotoxicity

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

Environmental effects

Ecological injuries are not known or expected under normal use.

Persistence and degradability

Not available.

13. Disposal Considerations

Disposal instructions

Dispose in accordance with all applicable regulations. Material should be recycled if possible.

14. Transport Information

DOT

Not regulated as dangerous goods.

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.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance

No

Section 311 hazardous chemical

No

Inventory status

Country(s) or region

Inventory name

On inventory (yes/no)*

Australia

Australian Inventory of Chemical Substances (AICS)

No

Canada

Domestic Substances List (DSL)

No

Canada

Non-Domestic Substances List (NDSL)

No

China

Inventory of Existing Chemical Substances in China (IECSC)

Yes

Europe

European Inventory of Existing Commercial Chemical Substances (EINECS)

No

Europe

European List of Notified Chemical Substances (ELINCS)

No

Japan

Inventory of Existing and New Chemical Substances (ENCS)

Yes

Korea

Existing Chemicals List (ECL)

No

New Zealand

New Zealand Inventory

No

Philippines

Philippine Inventory of Chemicals and Chemical Substances (PICCS)

No

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

No

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

State regulations

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

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

QUARTZ (CAS 14808-60-7)

Listed: October 1, 1988 Carcinogenic.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

POLYVINYLCHLORIDE (CAS 9002-86-2)

500 LBS

US - Pennsylvania RTK - Hazardous Substances: Listed substance

QUARTZ (CAS 14808-60-7)

Listed.

16. Other Information**Recommended restrictions**

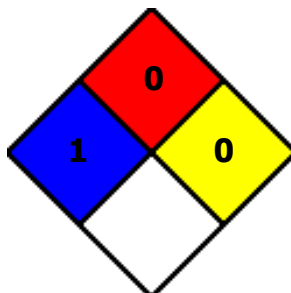
Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

Further information

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

HMIS ratings

HMIS®	HMIS®	HMIS®	HMIS®	HMIS®	HMIS®	HMIS®	HMIS®
HMIS®							
HEALTH		*	1				
FLAMMABILITY				0			
PHYSICAL HAZARD				0			
PERSONAL PROTECTION							
HMIS®	HMIS®	HMIS®	HMIS®	HMIS®	HMIS®	HMIS®	HMIS®

NFPA ratings**Disclaimer**

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