



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	PT-1E
Version #	01
Revision date	09-Jun-2008
Chemical description	Organoclay
Manufacturer information	CETCO Remediation Technology 1500 W. Shure Drive Suite 500 Arlington Heights, IL 60004 US General Information (800) 527-9948 CHEMTREC (800) 424-9300

2. Hazards Identification

Emergency overview	This product has the potential for generation of respirable dust during handling and use. Dust may contain respirable crystalline silica.
Potential health effects	
Eyes	Dust or powder may irritate eye tissue.
Skin	Health injuries are not known or expected under normal use. Non-irritating to the skin.
Inhalation	Inhalation of dusts may cause respiratory irritation. Repeated or prolonged inhalation may cause toxic effects. 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.
Chronic effects	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. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

Composition comments	This product contains naturally occurring crystalline silica (not listed in Annex I of Directive 67/548/EEC) in quantities less than 5%. Occupational Exposure Limits for impurities are listed in Section 8.
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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.
General advice	If you feel unwell, seek medical advice (show the label where possible). Immediate medical attention is required. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Keep victim warm. Take off contaminated clothing and shoes immediately. In case of shortness of breath, give oxygen.

5. Fire Fighting Measures

Flammable properties	The product is not flammable.
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Extinguishing media

Suitable extinguishing media

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

6. Accidental Release Measures

Personal precautions

Ensure adequate ventilation. Wear a dust mask if dust is generated above exposure limits.

Environmental precautions

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

Methods for containment

Stop leak if you can do so without risk.

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

No special restrictions on storage with other products. Store in a dry area. Guard against dust accumulation of this material.

8. Exposure Controls / Personal Protection

Occupational exposure limits

U.S. - OSHA

Impurities

NUISANCE PARTICULATES

CAS

RR-00072-6

Type

TWA
TWA (total dust)

Value

5 mg/m³
15 mg/m³

Form

(respirable fraction)
(total dust)

Exposure guidelines

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

ACGIH - Threshold Limit Values - TLV Basis - Critical Effects

QUARTZ 14808-60-7 lung cancer; pulmonary fibrosis

U.S. - OSHA - Final PELs - Table Z-3 Mineral Dusts

QUARTZ 14808-60-7 ((250)/(%SiO₂ + 5) mppcf TWA (respirable)); ((10)/(%SiO₂ + 2) mg/m³ TWA (respirable)); ((30)/(%SiO₂ + 2) mg/m³ TWA (total dust))

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.

Personal protective equipment

Eye / face protection

Wear dust goggles. Eye wash fountain is recommended.

Skin protection

No special protective equipment required. Normal work clothing (long sleeved shirts and long pants) is recommended.

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

Powder. Granular.

Color

Not available.

Odor

None.

Odor threshold

Not available.

Physical state

Solid.

Form

Solid.

pH

Not available.

Melting point	2192 °F (1200 °C) estimated
Freezing point	Not available.
Boiling point	2192 °F (1200 °C) estimated
Flash point	Not available.
Evaporation rate	Not available.
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	1.7852 estimated
Relative density	1.785 g/cm ³ estimated
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	0 % estimated
Percent volatile	0 % estimated

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

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

QUARTZ 14808-60-7 Oral LD50 Rat: 500 mg/kg

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

Carcinogenicity

ACGIH - Threshold Limit Values - Carcinogens

QUARTZ 14808-60-7 A2 - Suspected Human Carcinogen

IARC - Group 1 (Carcinogenic to Humans)

QUARTZ 14808-60-7 Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources)

NTP (National Toxicology Program) - Report on Carcinogens - Known Human Carcinogens

QUARTZ 14808-60-7 Known Human Carcinogen

12. Ecological Information

Ecotoxicity	This material is not expected to be harmful to aquatic life.
Environmental effects	Based on the physical properties of this product, significant environmental persistence and bioaccumulation would not be expected.
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.

IATA

Not regulated as dangerous goods.

IMDG

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.

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 Yes

Inventory status

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

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.

U.S. - California - Proposition 65 - Carcinogens List

QUARTZ 14808-60-7 carcinogen, initial date 10/1/88 (airborne particles of respirable size)

U.S. - New Jersey - Right to Know Hazardous Substance List

QUARTZ 14808-60-7 sn 1660

U.S. - Pennsylvania - RTK (Right to Know) List

QUARTZ 14808-60-7 Present

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®		
HEALTH	*	1
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION		

NFPA ratings

Health: 1
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 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.

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Other information

CETCO is a wholly owned division/subsidiary of AMCOL International Corp.