

1. Identification

Product identifier	PM-100™	
Other means of identification	None.	
Recommended use	Not available.	
Recommended restrictions	None known.	
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	www.cetco.com	
E-mail	safetydata@mineralstech.com	
Emergency phone number	1.866.519.4752 (US, CA, MX)	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	Category 1
Environmental hazards	Not classified.	
Label elements		



Signal word	Danger	
Hazard statement	May cause cancer. Causes damage to organs through prolonged or repeated exposure. The substance does not meet the criteria for classification.	
Precautionary statement		
Prevention	Keep out of reach of children. Read label 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. Observe good industrial hygiene practices.	
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 regulations.	
Disposal	Dispose of waste and residues in accordance with local authority requirements. Dispose of contents/container in accordance with local/regional/national/international regulations.	
Other hazards	None known.	
Supplemental information	100% of the substance consists of component(s) of unknown acute oral toxicity. 100% of the substance consists of component(s) of unknown acute dermal toxicity. 100% of the substance consists of component(s) of unknown acute inhalation toxicity. 100% of the substance consists of component(s) of unknown acute hazards to the aquatic environment. 100% of the substance 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	%
ANTHRACITE		8029-10-5	50 - < 70
Other components below reportable levels			30 - < 40

Constituents

Chemical name	Common name and synonyms	CAS number	%
QUARTZ (SIO ₂)		14808-60-7	<= 6
CRISTOBALITE		14464-46-1	<= 2

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 Occupational Exposure Limits for constituents are listed in Section 8.

4. First-aid measures

Inhalation	Remove to fresh air. Move to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops or persists.
Eye contact	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists. Get medical attention if irritation develops and persists.
Ingestion	If ingestion of a large amount does occur, seek medical attention. No special measures required.
Most important symptoms/effects, acute and delayed	Dusts may irritate the respiratory tract, skin and eyes. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Take off contaminated clothing and shoes immediately. In case of shortness of breath, give oxygen. Immediate medical attention is required. 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. Keep victim warm.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
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	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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Methods and materials for containment and cleaning up

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage**Precautions for safe handling**

Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store in a well-ventilated place. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection**Occupational exposure limits****US. ACGIH Threshold Limit Values**

Constituents	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m ³	Respirable fraction.
QUARTZ (SIO ₂) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Additional components	Type	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	TWA	3 mg/m ³	Respirable particles.
		10 mg/m ³	Total particulate.
Constituents	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m ³	Respirable particles.
QUARTZ (SIO ₂) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable.
		0.025 mg/m ³	Respirable particles.

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Additional components	Type	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	TWA	3 mg/m ³	Respirable fraction.
		10 mg/m ³	Total dust.
Constituents	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m ³	Respirable fraction.
QUARTZ (SIO ₂) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Constituents	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m ³	Respirable fraction.
QUARTZ (SIO ₂) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Additional components	Type	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
Constituents	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable fraction.
QUARTZ (SIO2) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable fraction.

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Additional components	Type	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	TWA	10 mg/m3	Total dust.
Constituents	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable dust.
QUARTZ (SIO2) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable dust.

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Additional components	Type	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	15 minute	6 mg/m3	Respirable fraction.
		20 mg/m3	Inhalable fraction.
	8 hour	3 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
Constituents	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	15 minute	10 mg/m3	Inhalable fraction.
	8 hour	0.05 mg/m3	Respirable fraction.
QUARTZ (SIO2) (CAS 14808-60-7)	8 hour	0.05 mg/m3	Respirable fraction.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation 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**

Applicable for industrial settings only. If contact is likely, safety glasses with side shields are recommended.

Skin protection**Hand protection**

Applicable for industrial settings only. Wear appropriate chemical resistant gloves.

Other

Applicable for industrial settings only. Use of an impervious apron is recommended.

Respiratory protection

Applicable for industrial settings only. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

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.

9. Physical and chemical properties**Appearance**

Powder. Granular.

Physical state	Solid.
Form	Powder.
Color	Not available.
Odor	None.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Non-flammable
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Negligible
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Non-soluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Dust explosion properties	
St class	1
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	0 % estimated estimated
Specific gravity	1.2 - 1.7

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin.

Eye contact	Direct contact with eyes may cause temporary irritation.	
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	Dusts may irritate the respiratory tract, skin and eyes. Exposure may cause temporary irritation, redness, or discomfort.	
Information on toxicological effects		
Acute toxicity	Not known.	
Toxicological data		
Constituents	Species	Test Results
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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	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Canada - Alberta OELs: Irritant		
CRISTOBALITE (CAS 14464-46-1)		Irritant
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
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.	
ACGIH Carcinogens		
CRISTOBALITE (CAS 14464-46-1)		A2 Suspected human carcinogen.
QUARTZ (SIO2) (CAS 14808-60-7)		A2 Suspected human carcinogen.
Canada - Alberta OELs: Carcinogen category		
CRISTOBALITE (CAS 14464-46-1)		Suspected human carcinogen.
QUARTZ (SIO2) (CAS 14808-60-7)		Suspected human carcinogen.
Canada - Manitoba OELs: carcinogenicity		
CRISTOBALITE (CAS 14464-46-1)		Suspected human carcinogen.
QUARTZ (SIO2) (CAS 14808-60-7)		Suspected human carcinogen.
Canada - Quebec OELs: Carcinogen category		
CRISTOBALITE (CAS 14464-46-1)		Detected carcinogenic effect in animals.
QUARTZ (SIO2) (CAS 14808-60-7)		Suspected carcinogenic effect in humans.
IARC Monographs. Overall Evaluation of Carcinogenicity		
CRISTOBALITE (CAS 14464-46-1)		1 Carcinogenic to humans.
QUARTZ (SIO2) (CAS 14808-60-7)		1 Carcinogenic to humans.
US. National Toxicology Program (NTP) Report on Carcinogens		
CRISTOBALITE (CAS 14464-46-1)		Known To Be Human Carcinogen.
QUARTZ (SIO2) (CAS 14808-60-7)		Reasonably Anticipated to be a 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. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

12. Ecological information

Ecotoxicity

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

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data available.

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

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

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

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.

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 the IBC Code Not applicable.

15. Regulatory information

Canadian regulations

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

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
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)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
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)

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	29-May-2018
Revision date	16-December-2020
Version #	28
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

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.

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Revision information

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