

## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 10/05/2017

Reviewed on 10/05/2017

### 1 Identification

**Product Identifier**

**Trade name:** CAFCO<sup>®</sup> FENDOLITE<sup>®</sup> M-II

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

**Product Description** Spray-Applied Fire Resistive Material (SFRM)

**Details of the Supplier of the Safety Data Sheet:**

**Manufacturer/Supplier:**

United States Mineral Products Company dba Isolatek International  
41 Furnace Street  
Stanhope, NJ 07874  
973 347 1200

**Emergency telephone number:** CHEMTREC 800 424 9300 (USA), +1 703 527 3887 (International)

### \* 2 Hazard(s) Identification

**Classification of the substance or mixture:**



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

Eye Irrit. 2B H320 Causes eye irritation.

**Label elements:**

**GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms:**



GHS07

**Signal word:** Warning

**Hazard-determining components of labeling:**

Cement, Portland  
Vermiculite

**Hazard statements:**

H315+H320 Causes skin and eye irritation.

H335 May cause respiratory irritation.

**Precautionary statements:**

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

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**Trade name: CAFCO® FENDOLITE® M-II**

- P272 Contaminated work clothing must not be allowed out of the workplace.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P284 [In case of inadequate ventilation] wear respiratory protection.
- P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
- P302+P352 If on skin: Wash with plenty of water.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P312 Call a poison center/doctor if you feel unwell.
- P314 Get medical advice/attention if you feel unwell.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Unknown acute toxicity:**

This value refers to knowledge of known, established toxicological or ecotoxicological values. 61 % of the mixture consists of component(s) of unknown toxicity.

**Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme  
**NFPA ratings (scale 0 - 4)**



**HMIS-ratings (scale 0 - 4)**



**Hazard(s) not otherwise classified (HNOC):** None known

**3 Composition/Information on Ingredients**

**Chemical characterization: Mixtures**

**Description:** Mixture of substances listed below with non-hazardous additions.

**Dangerous Components:**

CAS: 65997-15-1	Cement, Portland	40-60%
RTECS: VV 8770000	☠ Eye Dam. 1, H318; ☠ Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	

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**Trade name: CAFCO® FENDOLITE® M-II**

CAS: 1318-00-9	Vermiculite ☠ STOT RE 2, H373; ☠ STOT SE 3, H335	15-30%
CAS: 14808-60-7 RTECS: VV 7330000	Quartz (SiO <sub>2</sub> ) ☠ Carc. 1A, H350; STOT RE 1, H372; ☠ Acute Tox. 4, H332; STOT SE 3, H335; Eye Irrit. 2B, H320	<1%

**Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

### 4 First-Aid Measures

**Description of first aid measures:**

**General information:** Symptoms may occur with exposure to dust.

**After inhalation:** Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.

**After skin contact:**

Wash with soap and water.

If skin irritation occurs, consult a doctor.

**After eye contact:**

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

If easy to do so, remove contact lenses if worn.

**After swallowing:**

Not a normal route of entry.

Do not induce vomiting without medical advice.

If swallowed and symptoms occur, consult a doctor.

**Information for doctor:**

**Most important symptoms and effects, both acute and delayed:**

Quartz: Can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death; inhaled from occupational sources is classified as carcinogenic to humans. Some studies show in workers exposed to respirable quartz excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease, chronic bronchitis and emphysema.

**Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

### 5 Fire-Fighting Measures

**Extinguishing media:**

**Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

**Special hazards arising from the substance or mixture:** No further relevant information available.

**Advice for firefighters:** Product does not burn.

**Protective equipment:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

### 6 Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Not required. (Contd. on page 4)



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**Environmental precautions:** No special measures required.

**Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

**Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**Protective Action Criteria for Chemicals**

**PAC-1:**

1318-00-9	Vermiculite	32 mg/m <sup>3</sup>
14808-60-7	Quartz (SiO <sub>2</sub> )	0.075 mg/m <sup>3</sup>

**PAC-2:**

1318-00-9	Vermiculite	360 mg/m <sup>3</sup>
14808-60-7	Quartz (SiO <sub>2</sub> )	33 mg/m <sup>3</sup>

**PAC-3:**

1318-00-9	Vermiculite	2,200 mg/m <sup>3</sup>
14808-60-7	Quartz (SiO <sub>2</sub> )	200 mg/m <sup>3</sup>

### 7 Handling and Storage

**Handling**

**Precautions for safe handling:** Avoid creation and breathing dust.

**Information about protection against explosions and fires:** No special measures required.

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

**Storage**

**Requirements to be met by storerooms and receptacles:** No special requirements.

**Information about storage in one common storage facility:** Keep material dry.

**Further information about storage conditions:** None

**Specific end use(s):** No further relevant information available.

### 8 Exposure Controls/Personal Protection

**Additional information about design of technical systems:** No further data; see section 7.

**Control parameters:**

**Components with occupational exposure limits:**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

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<b>65997-15-1 Cement, Portland</b>	
PEL	Long-term value: 50 mppcf or 15* 5** mg/m <sup>3</sup> **total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m <sup>3</sup> **total dust **respirable fraction
TLV	Long-term value: 1* mg/m <sup>3</sup> E; *as respirable fraction
<b>14808-60-7 Quartz (SiO<sub>2</sub>)</b>	
PEL	50* µg/m <sup>3</sup> *as respirable fraction
REL	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m <sup>3</sup> *as respirable fraction

**Additional information:** The lists that were valid during the creation of this SDS were used as basis.

**Exposure controls:**

**Personal protective equipment:**

**General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

**Breathing equipment:**



Dust mask

**Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Select glove material based on penetration times, rates of diffusion and degradation.

**Material of gloves:**

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material:**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

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Trade name: **CAFCO<sup>®</sup> FENDOLITE<sup>®</sup> M-II****Eye protection:**

Safety glasses

**9 Physical and Chemical Properties****Information on basic physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	Powder
<b>Color:</b>	Grey
<b>Odor:</b>	Mild
<b>Odor threshold:</b>	Not determined.
<b>pH-value @ 20 °C (68 °F):</b>	10-12

**Change in condition**

<b>Melting point/Melting range:</b>	981 °C (1,797.8 °F)
<b>Boiling point/Boiling range:</b>	Not determined.

**Flash point:** None**Flammability (solid, gaseous):** Not determined.**Ignition temperature:** Not applicable**Decomposition temperature:** Not determined.**Auto igniting:** Product is not self-igniting.**Danger of explosion:** Product does not present an explosion hazard.**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

**Vapor pressure:** Not applicable.**Density:**

<b>Relative density:</b>	Not determined.
<b>Vapor density:</b>	Not applicable.
<b>Evaporation rate:</b>	Not applicable.

**Solubility in / Miscibility with:****Water:** Insoluble.**Partition coefficient (n-octanol/water):** Not determined.**Viscosity:**

<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.

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**Trade name: CAFCO® FENDOLITE® M-II****Other information:** No further relevant information available.**10 Stability and Reactivity****Reactivity:** No further relevant information available.**Chemical stability:** Stable under normal conditions.**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.**Possibility of hazardous reactions:** No dangerous reactions known.**Conditions to avoid:** Contact with strong acids**Incompatible materials:** Strong acids**Hazardous decomposition products:** No dangerous decomposition products known.**11 Toxicological Information****Information on toxicological effects:****Acute toxicity:****LD/LC50 values that are relevant for classification:****14808-60-7 Quartz (SiO<sub>2</sub>)**

Oral LD50 &gt;22,500 mg/kg (Rat)

Inhalative LC50/96 hours 1,033 mg/l (Trout)

**Primary irritant effect:****On the skin:** No irritating effect.**On the eye:** Irritating effect.**Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

**Carcinogenic categories:****IARC (International Agency for Research on Cancer):**

"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, silicate 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. May cause cancer. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled"

Group 1 - Carcinogenic to humans

Group 2A - Probably carcinogenic to humans

Group 2B - Possibly carcinogenic to humans

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**Trade name: CAFCO® FENDOLITE® M-II**

Group 3 - Not classifiable as to its carcinogenicity to humans  
 Group 4 - Probably not carcinogenic to humans

14808-60-7	Quartz (SiO <sub>2</sub> )	1
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**NTP (National Toxicology Program):**

14808-60-7	Quartz (SiO <sub>2</sub> )	K
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**OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

### 12 Ecological Information

**Toxicity:**

**Aquatic toxicity:**

14808-60-7 Quartz (SiO <sub>2</sub> )		
EC50	218 mg/l (Green algae)	

**Persistence and degradability:** No further relevant information available.

**Behavior in environmental systems:**

**Bioaccumulative potential:** No further relevant information available.

**Mobility in soil:** No further relevant information available.

**Additional ecological information:**

**General notes:** No further relevant information available.

**Results of PBT and vPvB assessment:**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects:** No further relevant information available.

### 13 Disposal Considerations

**Waste treatment methods:**

**Recommendation:**

Observe all federal, state and local environmental regulations when disposing of this material.

**Uncleaned packagings**

**Recommendation:** Disposal must be made according to official regulations.

### 14 Transport Information

**UN-Number:**

**DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material

**UN proper shipping name:**

**DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material

**Transport hazard class(es):**

**DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material

**Class:**

**Packing group:** Non-Regulated Material

**DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material

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**Trade name: CAFCO® FENDOLITE® M-II**

<b>Environmental hazards:</b>	Not applicable.
<b>Special precautions for user:</b>	Not applicable.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:</b>	Not applicable.
<b>UN "Model Regulation":</b>	Non-Regulated Material

<b>*15 Regulatory Information</b>
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**Safety, health and environmental regulations/legislation specific for the substance or mixture:  
SARA (Superfund Amendments and Reauthorization):**

<b>Section 355 (extremely hazardous substances):</b>	
None of the ingredients are listed.	
<b>Section 313 (Specific toxic chemical listings):</b>	
None of the ingredients are listed.	
<b>TSCA (Toxic Substances Control Act):</b>	
65997-15-1	Cement, Portland
14808-60-7	Quartz (SiO <sub>2</sub> )
<b>California Proposition 65:</b>	
<b>Chemicals known to cause cancer:</b>	
14808-60-7	Quartz (SiO <sub>2</sub> )
<b>Chemicals known to cause reproductive toxicity for females:</b>	
None of the ingredients are listed.	
<b>Chemicals known to cause reproductive toxicity for males:</b>	
None of the ingredients are listed.	
<b>Chemicals known to cause developmental toxicity:</b>	
None of the ingredients are listed.	
<b>New Jersey Right-to-Know List:</b>	
65997-15-1	Cement, Portland
14808-60-7	Quartz (SiO <sub>2</sub> )
<b>New Jersey Special Hazardous Substance List:</b>	
14808-60-7	Quartz (SiO <sub>2</sub> )
	CA
<b>Pennsylvania Right-to-Know List:</b>	
65997-15-1	Cement, Portland
14808-60-7	Quartz (SiO <sub>2</sub> )
<b>Pennsylvania Special Hazardous Substance List:</b>	
None of the ingredients are listed.	

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**Trade name: CAFCO® FENDOLITE® M-II**

**Carcinogenic categories:**

**EPA (Environmental Protection Agency):**

None of the ingredients are listed.

**TLV (Threshold Limit Value established by ACGIH):**

14808-60-7	Quartz (SiO <sub>2</sub> )	A2
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**NIOSH-Ca (National Institute for Occupational Safety and Health):**

14808-60-7	Quartz (SiO <sub>2</sub> )
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**GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms:**



GHS07

**Signal word:** Warning

**Hazard-determining components of labeling:**

Cement, Portland  
Vermiculite

**Hazard statements:**

H315+H320 Causes skin and eye irritation.  
H335 May cause respiratory irritation.

**Precautionary statements:**

P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P301+P330+P331	If swallowed: Rinse mouth. Do NOT induce vomiting.
P302+P352	If on skin: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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P312	Call a poison center/doctor if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
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Trade name: **CAFCO<sup>®</sup> FENDOLITE<sup>®</sup> M-II**

P362+P364 Take off contaminated clothing and wash it before reuse.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### National regulations:

None of the ingredients are listed.

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

**Date of preparation / last revision:** 10/05/2017 / 20

#### Abbreviations and acronyms:

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road  
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
NIOSH: National Institute for Occupational Safety and Health  
OSHA: Occupational Safety & Health Administration  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B  
Skin Sens. 1: Skin sensitisation – Category 1  
Carc. 1A: Carcinogenicity – Category 1A  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1  
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

\* **Data compared to the previous version altered.**

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