

Safety Data Sheet

Prepared in accordance with GHS standard
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

Revision date: June-2019

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Section 1: Identification

Product Identifier (Name) Gem Gard MSF

Relevant identified uses of the chemical and restriction on use

The "Relevant" use identified is provided solely to conform to Governmental requirements, and is not included in the manufacturer's published data and specifications. The complete information on identified uses is not available now, and the Safety Data Sheet ("SDS") will be updated, as it becomes available.

Details of the supplier of the safety data sheet

Manufacturer	Gemite Products Inc.
	1787 Drew Road, Mississauga, Ontario, L5S 1J5, Canada
Telephone	(905) 672-2020
Emergency telephone number	905 672 2020
Other means of identification	
Chemical family	Reactive silicate for using as concrete slab hardener

Section 2: Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Oral)	Category 4
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Unknown toxicity - Health

Acute toxicity, oral	0.0089 %
Acute toxicity, dermal	22.62 %
Acute toxicity, inhalation, vapor	22.62 %
Acute toxicity, inhalation, dust or mist	0.009 %

Hazard Symbol: Not applicable

Signal Word: Warning

Hazard Statement: Harmful if swallowed.

Precautionary Statements

Prevention: Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Response: IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

Section 3: Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)
Magnesium fluorosilicate	16949-65-8	20-<50%

*All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Impurities and stabilizing additives which are classified and which contribute to the classification of the chemical: **None**
The chemical name and concentration (i.e., exact percentage) of all ingredients which are classified as health hazards and are present above their cut-off/concentration limits or present a health risk below the cut-off/concentration limits: **None**

All other ingredients are non-hazardous within the current knowledge of the supplier and in the concentrations applicable.

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Section 4: First-aid measures

Description of First Aid measures

General advice

First aid personnel should pay attention to their own safety. Remove contaminated clothing.

If inhaled

In the case of respiratory irritation, move to fresh air; consult a physician if symptoms persist.

If on skin

In the case of skin irritation, wash off with soap and water; consult a physician if symptoms persist.

If in eyes

Remove contact lenses if present, and flush eyes with water for at least 15 minutes; consult a physician if symptoms persist.

If swallowed

Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Most important symptoms and effects, both acute and delayed

Inhalation: May cause respiratory irritation.

Skin contact: May cause skin irritation.

Eye contact: May cause eye irritation.

Ingestion: Unknown

Recommendations for immediate medical care and special treatment needed, when necessary: Get medical attention if symptoms occur.

Section 5: Fire-fighting measures

General Fire Hazards:

No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:

materials.

Use fire-extinguishing media appropriate for surrounding

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

Special fire fighting procedures:

No data available.

Special protective equipment for fire-fighters:

must be worn in case of fire.

Self-contained breathing apparatus and full protective clothing

Section 6: Accidental release measures

Personal precautions, protective equipment

and emergency procedures:

No data available.

Methods and material for containment and cleaning up:

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Notification Procedures:

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions:

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

Section 7: Handling and Storage

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Precautions for safe handling:

Do not taste or swallow. Wash hands thoroughly after handling.
 Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any

incompatibilities:

Store away from incompatible materials. Store in original tightly closed container.

Section 8: Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
Magnesium fluorosilicate – as F	TWA	2.5 mg/m ³	US. ACGIH Threshold Limit Values (2011)
	PEL	2.5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Magnesium fluorosilicate - Dust.	TWA	2.5 mg/m ³	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
Magnesium fluorosilicate – as F	TWA	2.5 mg/m ³	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Magnesium fluorosilicate – as F	TWA	2.5 mg/m ³	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Magnesium fluorosilicate – as F	TWA	2.5 mg/m ³	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

Biological Limit Values

Chemical name	Exposure Limit Values	Source
Magnesium fluorosilicate (Fluoride: Sampling time: Prior to shift.)	2 mg/l (Urine)	ACGIH BEI (03 2013)
Magnesium fluorosilicate (Fluoride: Sampling time: End of shift.)	3 mg/l (Urine)	ACGIH BEI (03 2013)

Appropriate Engineering

Observe good industrial hygiene practices. Observe occupational exposure

Controls

limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information:

Use personal protective equipment as required.

Eye/face protection:

Wear goggles/face shield.

Skin Protection

Hand Protection:

Use suitable protective gloves if risk of skin contact.

Other:

No data available.

Respiratory Protection:

In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

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Hygiene measures: Observe good industrial hygiene practices.

Section 9: Physical and chemical properties

Appearance:

Form:	Liquid
Physical State	Liquid
Colour:	Colorless
Odor:	Mild
Odor threshold:	No data available.
pH:	2.5
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	No data available.
Evaporation rate:	Slower than Ether
Flammability (solid, gas):	No
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure: No data available.	
Vapor density:	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density:	1.06
Solubility(ies)	
Solubility in water:	Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

Section 10: Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	Strong Acids. Strong Bases.
Hazardous Decomposition	

Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors

Section 11: Toxicological information

Acute toxicity:

Skin Contact:	Moderately irritating to skin with prolonged exposure.
Eye contact:	Eye contact is possible and should be avoided.
Ingestion:	Harmful if swallowed.

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Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix: 1,287.03 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Inhalation

Product: ATEmix: 15.04 mg/l

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects:

No data available.

Section 12: Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

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Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Other adverse effects: No data available.

Section 13: Disposal considerations

- Description of appropriate disposal containers to use: **Standard disposal containers are acceptable.**
- Recommendations of appropriate disposal methods to employ: **Dispose of in accordance with governmental regulations for non-hazardous solid waste.**
- Description of the physical and chemical properties that may affect disposal activities: **None known**
- Language discouraging sewage disposal: **Disposable via septic or sewage systems is not recommended.**
- Any special precautions for landfills or incineration activities: **None known**
- **Recycling of packaging materials is encouraged where possible**

Section 14: Transport Information (non-mandatory) Section 14: Transport information

- UN number (i.e., four-figure identification number of the substance): **None**
- UN proper shipping name: **Not applicable**
- Transport hazard class(es): **Not applicable**
- Packing group number, if applicable, based on the degree of hazard: **Not applicable**
- Environmental hazards (e.g., identify if it is a marine pollutant according to the International Maritime Dangerous Goods Code (IMDG Code)): **None known**
- Guidance on transport in bulk (according to Annex II of MARPOL 73/78 and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code (IBC Code))): **Not applicable**

Section 15: Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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Hazard categories

Immediate (Acute) Health Hazards

Acute toxicity

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Magnesium fluorosilicate	10000 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Magnesium fluorosilicate

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Magnesium fluorosilicate

US. Rhode Island RTK

Chemical Identity

Magnesium fluorosilicate

International regulations

Montreal protocol

not applicable

Stockholm convention

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not applicable

Rotterdam convention

not applicable

Kyoto protocol

not applicable

VOC:

Regulatory VOC (less water and exempt solvent): 0 g/l

VOC Method 310: 0.00 %

Section 16: Other information

Hazard Classification

Health Hazards

Acute toxicity (Oral) Category 4

Unknown toxicity - Health

Acute toxicity, oral 0.0089 %

Acute toxicity, dermal 22.62 %

Acute toxicity, inhalation, vapor 22.62 %

Acute toxicity, inhalation, dust or mist 0.009 %

Hazard Symbol: Not applicable

Signal Word: Warning

Hazard Statement: Harmful if swallowed.

Caution: HMIS® rating is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating is not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® rating is to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). Please note HMIS® attempts to convey full health warning information to all employees.

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