

Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: Ember Bloc Fire Gel

Chemical Family: Mineral / Carbohydrate Mixture

Application: Fire Retardant Gel / Water Enhancer

Manufacturer/Supplier: JJS Fire Supply
11356 SW Mountain Ash Cir.
Port St. Lucie, FL 34987
Tel: 1-772-284-4233

Emergency Phone number: 1-772-284-4233

Section 2: Hazard(s) Identification

Hazard Classification of mixture
: Carcinogenicity (Category 1A)
Specific Target Organ Toxicity (Repeated Exposure) (Category 1)

Signal Word: Danger

Hazard Statements: Silica component may cause cancer.
Causes damage to organs through prolonged or repeated exposure.



Hazard Symbol:

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. If medical advice is needed, have product container or label at hand.

Keep out of reach of children. Do not breath dust. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

Combustible Dust Hazard: May form combustible dust concentrations in air before hydrating.

Response: If exposed or concerned: Get medical advice/attention.
Get medical attention/advice if you feel unwell.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards Not Otherwise Classified: May cause eye and respiratory irritation.

Section 3: Composition/Information on Ingredients

Substances	CAS Number	Percent
Crystalline Silica, quartz	14808-60-7	≤6%
Soluble Maize Starch	9005-25-8	≤40%

Section 4: First-Aid Measures

Inhalation: If inhaled, remove to a dust free area. Get medical attention if respiratory irritation develops or if breathing becomes difficult. Inhalation may aggravate existing respiratory illness.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Skin: Wash with soap and water. Seek medical attention if irritation persists.

Ingestion: Do Not induce vomiting. First aid measures not normally required.

Notes to Physician: Treat symptomatically. Most important symptoms and effects, both acute and delayed include nausea, headache, shortness of breath.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media: Product mixture contains starch powder which can form a combustible dust. All standard firefighting media may be used.

Unsuitable Extinguishing Media: None

Special Exposure Hazards: Product dust may be combustible.

Special Protective Equipment: None for product. Wear self-contained breathing apparatus (SCBA) and full protective gear.

Precautions for Firefighters: Caution: slippery when wet.

NFPA Ratings: Health 1, Flammability 0, Reactivity 0

Section 6: Accidental Release Measures

Personal Precautionary Measures: Use appropriate protective equipment. Use proper respiratory protective device against the effects of dust. Ensure adequate ventilation. Keep dust away from ignition sources. Prevent further leakage or spillage if safe to do so. Contain spilled material by diking or using inert absorbent.

Environmental Precautionary Measures: No special environmental precautions required. Collect contaminated soil for characterization per Section 13.

Procedure for Cleaning/Absorption: Prevent further leakage or spillage if safe to do so. Avoid generating dust. Collect using appropriate dustless method. Dispose in landfill according to local, state and federal regulations.

Section 7: Handling and Storage

Handling Precautions: This product contains quartz which may become airborne. Avoid breathing dust. Avoid creating dusty conditions. Promptly clean up spills to avoid breathing airborne dust. Use only with adequate ventilation to keep exposure below recommended exposure limits. Wear a NIOSH/MSHA European Standard En 149, or equivalent certified for silica bearing dust, respirator when using this product. Material is slippery when wet.

Storage Information: Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Do not reuse empty container.

Section 8: Exposure Controls/Personal Protection

Occupational Exposure Limits Substances	CAS Number	ACGIH TLV-TWA	OSHA PEL-TWA*
---	------------	---------------	---------------

Crystalline Silica, quartz	14808-60-7	0.025 mg/m ³	10 mg/m ³ %SiO ₂ + 2
----------------------------	------------	-------------------------	---

* More restrictive exposure limits may be enforced by some states, agencies, or other authorities.

Engineering Controls:	Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits.
Personal Protective Equipment:	If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.
Respiratory Protection:	Not normally needed. If significant exposures exceeding occupational exposure limit are possible use NIOSH/MSHA respirator approved for silica bearing dust.
Hand Protection:	Standard work gloves.
Skin Protection:	Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.
Eye Protection:	Wear safety glasses or goggles to protect against exposure.
General hygienic measures:	The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with eyes and skin.

Section 9: Physical and Chemical Properties

Physical State:	Powdered Solid
Color:	Light tan to gray as dry powder
Odor:	Odorless

pH:	7– 10 (5% aqueous suspension)
Specific Gravity @ 20 C (Water=1):	2.1 – 2.2
Density @ 20 C (lbs/gallon):	Not determined
Bulk Density @ 20 C (lbs/ft3):	40 - 65
Boiling Point/Range (F/C):	Not applicable
Freezing Point/Range (F/C):	Not applicable
Vapor Pressure @ 20 C (mmHg):	Not applicable
Vapor Density (Air=1):	Not applicable
Percent Volatiles:	Not applicable
Evaporation Rate (Butyl Acetate=1):	Not applicable
Solubility in Water (g/100ml):	Starch component is soluble. Silica component is insoluble, forms colloidal suspension
Solubility in Solvents (g/100ml):	Not applicable
VOCs (lbs/gallon):	Not applicable
Viscosity, Dynamic @ 20 C (centipoise):	3.5 – 12.5 (6% aqueous suspension)
Viscosity, Kinematic @ 20 C (centistokes):	Not determined
Partition Coefficient/n-Octanol/Water:	Not applicable
Molecular Weight (g/mole):	Not applicable
Flash Point/Range (F/C):	Not applicable
Flash Point Method:	Not applicable
Autoignition Temperature (F/C):	392/200 for starch component. Not determined for silica component
Flammability Limits in Air – Lower (%):	Not determined
Flammability Limits in Air – Upper (%):	40% at 200C

Section 10: Stability and Reactivity

Reactivity:	Nonreactive under normal conditions
Chemical Stability:	Stable
Possibility of Hazardous Reactions:	Will not occur.
Conditions to Avoid:	Store away from oxidizing agents, strong acids or bases, excess heat. Avoid dust generation.
Incompatibility (Materials to Avoid):	Strong acids, strong bases, strong oxidizing agents.
Hazardous Decomposition Products:	Carbon oxides (CO, CO ₂)

Additional Guidelines:

Not applicable

Section 11: Toxicological Information

Principle Route of Exposure:

Eye or skin contact, inhalation.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Inhalation:

Inhaled crystalline silica in the form of quartz from occupational sources is carcinogenic to humans (IARC, Group 1).

Skin Contact:

May cause skin irritation due to drying.

Eye Contact:

May cause mechanical eye irritation.

Ingestion:

None known

Aggravated Medical Conditions:

Individuals with respiratory disease, including but not limited to asthma and bronchitis, or subject to eye irritation, should not be exposed to respirable quartz-bearing dust.

Chronic Effects/Carcinogenicity:

Silicosis: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes-fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness, and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop tuberculosis.

Cancer Status:

The International Agency for Research on Cancer (IARC, 1997) concludes that there is sufficient evidence in humans for carcinogenicity of inhaled crystalline silica from occupational sources (IARC Group 1), that carcinogenicity was not detected in all industrial circumstances studied and that carcinogenicity may depend on characteristics of the crystalline silica or on external factors affecting its biological activity. See IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997). The National Toxicology Program (NTP) classifies respirable crystalline silica as "Known to be a human carcinogen" (NTP 9th Report on Carcinogens, 2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

Other Information:

See "Adverse Effects of Crystalline Silica Exposure" published by the American Thoracic Society Medical Section of the American Lung Association, American Journal of Respiratory and Critical Care Medicine, Volume 155, pages 761-768 (1997).

Toxicity Tests

Oral Toxicity:	Not determined
Dermal Toxicity:	Not determined
Inhalation Toxicity:	Not determined
Primary Irritation Effect:	Not classified
Carcinogenicity:	Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997).
Genotoxicity:	Not classified
Reproductive/Developmental Toxicity:	Not classified

Section 12: Ecological Information (non-mandatory)

Mobility (Water/Soil/Air):	Not determined
Persistence/Degradability:	Starch component is readily degradable in most environments.
Bio-accumulation:	Not determined Ecotoxicological Information
Acute Fish Toxicity:	Not determined
Acute Crustaceans Toxicity:	Not determined
Acute Algae Toxicity:	Not determined
Chemical Fate Information:	Not determined
Other Information:	Not applicable

Section 13: Disposal Considerations (non-mandatory)

Disposal Method:	If product should become a waste, dispose in a licensed landfill according to federal, state and local regulations. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulator entities (US
------------------	---

40CFR262.11). Consult federal state/provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

Contaminated Packaging: Follow all applicable national or local regulations.

Section 14: Transport Information (non-mandatory)

Land Transportation

- DOT – Not regulated as dangerous goods
- Canadian TDG – Not regulated as dangerous goods
- ADR – Not regulated as dangerous goods

Air Transportation

- ICAO/IATA – Not regulated as dangerous goods

Sea Transportation

- IMDG – Not regulated as dangerous goods

Other Transportation Information

Labels: None

▪

Section 15: Regulatory Information (non-mandatory)

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

EPA SARA Title III Extremely Not applicable
Hazardous Substances

EPA SARA (311, 312)	
Hazard Class	Chronic Health Hazard

EPA SARA (313) Chemicals This product does not contain a toxic chemical for routine annual “Toxic Chemical Release Reporting” under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity	Not applicable
--	----------------

EPA RCRA Hazardous Waste	If product becomes a waste, it does NOT meet the criteria of a
--------------------------	--

Classification.	hazardous waste as defined by the US EPA.
California Proposition 65	This product contains crystalline silica (respirable) which is a substance known to the State of California to cause cancer.
Canadian Regulations	
Canadian DSL Inventory	All components listed on inventory or are exempt.
WHMIS Hazard Class	This product contains crystalline silica (respirable) and is classified as a Class D, Division 2, Subdivision A substance.

Section 16: Other Information

Prepared 03/24/2020

Disclaimer

All information presented herein is believed to be accurate; however, it is the user's responsibility to determine in advance of need that the information is current and suitable for their circumstances. No warranty or guarantee, expressed or implied is made by JJS Fire Supply as to this information, or as to the safety, toxicity or effect of the use of this product.