FireIce HVO-F
Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : FireIce HVO-F

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Fire Chemical (Gel)

1.3. Details of the supplier of the safety data sheet

GelTech Solutions
1460 Park Lane S, Suite 1
Jupiter, FL 33458

1.4. Emergency telephone number

T 561-427-6144 - F 561-427-6182

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Eye Irrit. 2B H320

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) : None

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H320 - Causes eye irritation

Precautionary statements (GHS-US) : P264 - Wash thoroughly after handling
P305 + P351 + P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/attention

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	Classification (GHS-US)
Polyacrylate polymer	(CAS No) Trade Secret	Eye Irrit. 2B, H320
Orange colorant	(CAS No) Trade Secret	Not classified
Performance additive	(CAS No) Trade Secret	Carc. 2, H351

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove to fresh air and remove material from affected areas. Seek medical advice or attention in the event of any adverse symptoms or irritation.

First-aid measures after skin contact : Wash with soap and water. Seek medical advice if skin irritation develops or persists.

First-aid measures after eye contact : Flush with plenty of water for at least 15 minutes. Seek medical advice if irritation develops or persists.

First-aid measures after ingestion : Seek medical advice or attention in the event of any adverse symptoms.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : Exposure to respirable dust may cause respiratory tract and lung irritation and may aggravate existing respiratory conditions.

Symptoms/injuries after skin contact : Exposure to the dust, such as in manufacturing, may aggravate existing skin conditions due to drying effect.

Symptoms/injuries after eye contact : Dust may cause burning, drying, itching and other discomfort, resulting in reddening of the eyes.

Symptoms/injuries after ingestion : Although not a likely route of entry, tests have shown that polyacrylate absorbents are non-toxic if ingested. However, as in any instance of non-food consumption, seek medical attention in the event of any adverse symptoms.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical, foam, carbon dioxide, water fog. Extremely slippery conditions are created if spilled product comes in contact with water.

Unsuitable extinguishing media : None.

5.2. Special hazards arising from the substance or mixture

Fire hazard : None known.

Explosion hazard : None known.

5.3. Advice for firefighters

Protection during firefighting : Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Stop the flow of material, if this is without risk. Use caution after contact of product with water as extremely slippery conditions will result.

Methods for cleaning up : Sweep or vacuum material when possible and shovel into a waste container. Dispose of waste in accordance with local, state and federal regulations.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, closed container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Orange colorant (Trade Secret)		
USA ACGIH	ACGIH TWA (mg/m³)	5 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³

Performance additive (Trade Secret)		
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³

8.2. Exposure controls

Appropriate engineering controls : Local exhaust and general ventilation must be adequate to meet exposure standards.

Hand protection : Use impervious gloves when handling the product in the manufacturing environment.

Eye protection : Wear safety glasses with side shields or goggles.

Skin and body protection : Wear suitable working clothes.

Respiratory protection : Wear respirator with a high efficiency filter if particulate concentrations in the work area exceed 0.05 mg/m^3 over an eight-hour period.

Personal protection equipment : Obey reasonable safety precautions and practice good housekeeping. Wash thoroughly after handling.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Powder.

Color : Orange

Odor : None

Odor threshold : No data available

pH : 5.5 - 6.5 (1% water solution)

Relative evaporation rate (butyl acetate=1) : No data available

Relative evaporation rate (ether=1) : < 1

Melting point : 390 °F

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : < 10 mm Hg

Relative vapor density at 20 °C : No data available

Specific gravity : 0.4 - 0.7 g/l

Solubility : Insoluble.

Log Pow : No data available

Log Kow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

None

10.5. Incompatible materials

None

10.6. Hazardous decomposition products

None known

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Orange colorant (Trade Secret)	
LD50 oral rat	> 10000 mg/kg

Performance additive (Trade Secret)	
LD50 oral rat	> 10000 mg/kg

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes eye irritation.

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Polyacrylate Polymer had no effect in mutagenicity tests.

Carcinogenicity : The Performance additive in this product contains Titanium Dioxide (TiO_2). IARC showed evidence of tumors through animal studies of pigmentary TiO_2 with particle size of 0.2 - 0.3 µm and ultrafine TiO_2 with particle size of 10-50 nm. The TiO_2 particles in this product are larger and do not fall into either of these two categories.

Orange colorant (Trade Secret)	
IARC group	3 - Not classifiable

Performance additive (Trade Secret)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

No negative or toxic effects on the environment are anticipated when released in dilution for terrestrial and aquatic ecosystems; based on government testing. Composted polyacrylate polymers are nontoxic to aquatic or terrestrial organisms at predicted exposure levels from current application rates.

12.2. Persistence and degradability

Decomposes over time or in the presence of natural sunlight when applied to terrestrial substrate or vegetation. Polyacrylate polymers are relatively inert in aerobic and anaerobic conditions. They are immobile in landfills and soil systems (>90% retention), with the mobile fraction showing biodegradability. They are also compatible with incineration of municipal solid waste. Incidental down-the-drain disposal of small quantities of polyacrylic polymers will not affect the performance of wastewater treatment systems.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

Polyacrylate polymers are immobile in landfills and soil systems (>90% retention), with the mobile fraction showing biodegradability.

12.5. Other adverse effects

Effect on ozone layer : No additional information available

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : In concentrate form, this product is a non-hazardous waste material suitable for approved solid waste landfills. Diluted product is non-soluble and can be disposed of in suitable effluent treatment plants. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

In accordance with DOT

Not a dangerous good as defined in transport regulations

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. US State regulations

The California Office of Environmental Health Hazard Assessment's ("OEHHA's") Proposition 65 listing for titanium dioxide in the Performance Additive applies to "titanium dioxide (airborne, unbound particles of respirable size)." Although the listing for titanium dioxide is silent on what constitutes a particle of "respirable" size, OEHHA guidance documents for other rulemakings refer to respirable particles as those smaller than 10 microns mass mean aerodynamic diameter, which is the particle diameter at which 50% of the particles by mass are larger and 50% are smaller.

Based on particle size analysis of the Performance Additive using laser scattering/diffraction to optically establish particle size, we have determined that the median particle size of this product is well above 10 microns. Thus, we have determined that Product 03904 is not subject to Proposition 65.

Orange colorant (Trade Secret)
U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Performance additive (Trade Secret)
U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases:

Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2B	Eye damage/eye irritation Category 2B
H320	Causes serious eye irritation
H351	Suspected of causing cancer

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product