

FyreRoc-SS
MATERIAL SAFETY DATA SHEET

SECTION 1.0 IDENTIFICATION

MANUFACTURED BY:



Engineered Polymer Products
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HAZARD RATING INFORMATION:

NFPA

Health 1
Fire 0
Reactivity 0

HMIS

Health 1
Fire 0
Reactivity 0
Personal Protection G

LABEL INFORMATION:

FyreRoc-SS

Primary Uses: FyreRoc-SS – Because of its physical properties such as being thermal resistance, inert, and relatively strong makes it ideal for use in construction materials of homes, buildings, and aircraft as thermal barrier.

SECTION 2.0 CHEMICAL COMPOSITION/INGREDIENTS

Component Name Synonym/Trade Name	CAS No.	% Composition	OSHA PEL	ACGIH TLV	Other NIOSH
FyreRoc-SS A cured Article	Not Available	Cured Product 100	Not Applicable	Not Applicable	Not Applicable

EMERGENCY OVERVIEW:

This material is a cured product (article) not anticipated to pose any exposure potential in its finished configuration or state. Potential exposure characteristics associated with this product will result through alteration of its finished form. Alteration may include mixing, sawing, grinding, sanding, and other forms of modification to the finished configuration. Contact from airborne glass particulate may be moderately irritating to the skin, eyes, and mucous linings of the respiratory and gastrointestinal tract.

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SECTION 3.0 HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Health effects are anticipated only when altering the article by cutting, sanding, or drilling. Normal handling of this article will not cause any negative health effects.

Relevant Routes of Exposure: Inhalation, ingestion, eye and skin contact

INHALATION: Symptoms experienced from overexposure to airborne concentrations of this substance may result in

- irritation to the mucous linings of the upper respiratory tract
- shortness of breath
- coughing
- wheezing or rales when breathing
- possible nosebleeds

NOTE:

Chronic exposures: Repeated or long term exposures through inhalation may cause an increased incidence of bronchitis.

Medical conditions aggravated by exposure: Any previously existing lung or pulmonary (breathing) condition.

Note: Smoking may negatively impact the body's ability to expel particles which, have been drawn deeper into the lungs. This is due to the paralyzing effect on the mucociliary tract, a protective mechanism used to dislodge and discharge particulate, fibers and other foreign matter from the lungs.

INGESTION: Symptoms experienced from swallowing this material may include

- Irritation to the mucous lining of the gastrointestinal tract.

Chronic exposure: None anticipated

Medical conditions aggravated by exposure: Possible skin and lung irritation.

SKIN CONTACT & ABSORPTION: Symptoms experienced resulting from skin contact with this material may include:

- Skin irritation may occur from mechanical means.
- intense itching and redness

Chronic exposures: None known.

Skin irritation is typically experienced by individuals newly exposed, but may actually diminish after several days exposure.

Medical conditions aggravated by exposure: Any previously existing skin condition may be further aggravated through

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exposure.

EYE CONTACT & ABSORPTION: Symptoms experienced resulting from contact with the eyes may include:

- moderate to severe irritation
- may cause transient conjunctivitis
- excessive tearing of the eyes

Irritation derived through exposure is considered to be mechanically generated and will pass once the irritant source is removed.

Chronic exposures: None anticipated. Irritation to the eyes is considered both infrequent and acute as the source is normally removed, due to the discomfort associated with contact of the eyes.

Medical conditions aggravated by exposure: No information available.

Note: It should be noted, as a precautionary measure, that these temporary effects to the eyes may directly impact an individuals ability to locate Emergency Exits and/or Eyewash stations to render first-aid.

Health effects described above are inclusive of the scientific information available for review, and evaluated on behalf of this product. Actual signs and symptoms experienced may vary due to impacting conditions at the time of exposure.

SECTION 4.0 FIRST AID MEASURES

Inhalation:

- Remove victim to fresh air.
- Support breathing, if necessary.
- Blow nose to evacuate fibers.
- Seek medical attention, as necessary, if symptoms develop or persist.

NOTE: One study suggests that cough suppressants should not be used. Cough syrups will suppress the victim's ability to expel the particles through coughing.

Ingestion:

- If victim is conscious and alert,
- Wash out mouth with water
 - Seek medical attention.
 - Do not induce vomiting

Eye:

- Holding eyelids open,
- Gently flush eyes for 15 minutes with large quantities of water.
 - Consult medical attention immediately.

Skin:

- Remove contaminated clothing
- Rinse affected areas with flooding amounts of water.
 - Wash area with soap and water.
 - Seek medical attention if irritation persists.

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Notes to the Physician: Use of antihistamines may control itching and redness. FyreRoc-SS is considered chemically inert and is not anticipated to produce toxic effects through ingestion.

SECTION 5.0 FIREFIGHTING MEASURES

Flash Point: None Reported	Flammability range	LEL(%): None Reported
Auto Ignition Temperature: None Reported		UEL(%): None Reported
Extinguishing Media: This material is non-combustible, use appropriate extinguishing media for surrounding fire.		
Special Firefighting Procedures : None		
Hazardous Decomposition Byproducts : None		
Unusual Fire & Explosion Hazards: None		

SECTION 6.0 ACCIDENTAL RELEASE MEASURES

Actions to Take for Spills: Where excessive concentrations of this material exists in a dust, particulate, or fiber form as a result of sawing, grinding, sanding, or some other material removal activity, cleanup personnel should

- Protect against skin, eye, and inhalation hazards through use of the prescribed protective equipment (See Section 8.0).
- Limit foot and vehicular traffic to minimize mechanical dispersions.
- Employ vacuums equipped with High Efficiency Particulate Air (HEPA) filters or wet mopping to minimize dust generation. HEPA VACs are the preferred method of collection as this devices can be used for cleanup of the work area, personnel, and equipment.

Containment: Substance can be cleaned up by vacuuming (with an appropriate filter) or wet mopping to minimize particle dispersion. This is a solid material and will not travel far from the spill location unless mechanically agitated.

Collection Containers: This material is compatible with any type of container selected including bags, fiber, steel, or plastic drums. Once in the container, reseal to avoid dust generation.

Disposal Criteria: This material in its present form is not a regulated waste, and may be disposed of as regular refuse.

SECTION 7.0 HANDLING AND STORAGE

Handling: When cutting, grinding, or sanding FyreRoc-SS all personnel are directed to:

- Wear all specified elements of Personal Protective Equipment (PPE) as directed by this document (See

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Section 8.0) or under location specific requirements, which ever is most conservative.

- Employ active dust and particulate collection techniques such as cutting and sanding tools equipped with vacuum collection systems. Where possible employ local or general ventilation to support dust collection and control of airborne concentrations.
- After handling this product, individuals are directed to properly segregate clothing to be washed separately. Do **NOT** wash these items at home. Clothing brought home with embedded FyreRoc-SS and particulate may contaminate household laundry. The transfer of contamination from associated work garments to other clothing items may cause irritation to the individuals (other family members) wearing these articles. Wash or replace protective clothing articles before the next use.
- Wash thoroughly with a mild soap and generous amounts of water to flush potential fibers from the skin.
- Do not eat, drink, or use tobacco products in areas of product use, storage, or handling, as this activity may introduce particulate to a potential route of exposure.
- Employ good housekeeping of the work area. Provide waste bins to collect and contain excess unused FyreRoc-SS.

- Storage:** Store, handle, and use cured FyreRoc-SS in a manner that limits the production of airborne particulate in the workplace.
- Store in a cool dry location. Direct exposure to harsh environmental elements may cause premature aging and degradation of the unit. Finer fibers employed in some applications are particularly prone to environmental influence, and will show signs of degradation much faster.
 - Avoid physical damage, do not store in areas prone to accidental damage (i.e. excessive forklift traffic).

SECTION 8.0 PERSONAL PROTECTION

Engineering Controls: These control measures have been assigned based on the ability to control potential exposures and health effects during product use and handling.

Ventilation: Local mechanical ventilation is preferred to control airborne particulate below permissible exposure limits (See Section 2.0). Avoid dust-generating conditions.

EMPLOYEE PROTECTIVE MEASURES

Respiratory Protection: Cutting, sanding, or grinding this product requires the use of the following NIOSH/MSHA approved respiratory protection:

- Air Purifying Respirator (APR) with a HEPA cartridge is recommended for use. A Full-face APR should be used for extensive cutting, grinding, or sanding. This is anticipated for concentrations of up to 1000 mg/m³ or where the potential for eye contact and irritation is directly impacted. A Half-face APR may be employed for

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incidental work providing it is used in conjunction with suitable eye protection.

These respirators are to be employed for concentrations exceeding the Permissible Exposure Limits, recommended Threshold limits Values (See Section 2.0), or where the airborne concentration is unknown.

- self-contained Breathing Apparatus (SCBA) is recommended for:
 - IDLH concentrations
 - Oxygen deficient atmospheres
 - Confined space operations
 - Fire/explosive situations
 - In situations where the conditions for using APRs are unacceptable

Utilization of respiratory equipment should be in accordance with 29 CFR 1910.134. All participants employing respiratory protection should be active participants in a Respiratory Protection Program.

Chemical Protective Clothing/Gloves: Cotton or disposable coveralls are recommended to prevent contamination of street clothing. Reusable coveralls should be laundered after use to avoid possible skin irritation of embedded fibers.

Leather or cotton work gloves as appropriate for the operation. **Note:** Some operations will not permit the use of gloves due to tactility, or possible entanglement hazards. Where this is the case, location required safety measures are recommended.

Eye/Face Protection: Impact rated safety glasses with side shields under a full-face shield are to be used when cutting, sanding, or grinding this product. These items will not be used when a full-face APR is selected to achieve respiratory and eye and face protection.

Head and Feet: Hardhats are recommended where overhead hazards exist. Steel toe/steel shank protective footwear is recommended where foot hazards exist. Both items may be location specific requirements, which will take precedence.

Other: emergency eyewash is recommended for the work area to offer first-aid procedures for contact with eyes. Workers should have access to areas to wash up after handling this product.

Break areas, lunchrooms, and other areas used for food consumption, or use of tobacco products, should be physically separated from the area of operation.

- Work Hygiene Practices:** To control potential exposures
- Avoid contact where possible.
 - Do NOT eat, drink, smoke, or perform any other hand to mouth activity in areas of product use or handling.
 - Wash thoroughly after handling this product.

SECTION 9.0 CHEMICAL AND PHYSICAL PROPERTIES

Boiling Point:	NA	Vapor Pressure (mmHg):	NA
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Freezing Point: NA	Vapor Density (Air = 1): NA
Melting Point: ~1500 - 2000°F; 815 - 1093°C	Evaporation Rate: NA
Solubility in Water: N.A	Percent Volatility: N.A
Coefficient Water/Oil Distribution: NA	Specific Gravity (Water = 1): ~1.5 to 2.5
Odor/Odor Threshold: N.A	pH: NA
Appearance: White to gray	

SECTION 10.0 STABILITY AND REACTIVITY

Chemical Stability: Stable	Conditions to Avoid: Physical damage. Smaller diameter FyreRoc-SS is more susceptible to environmental conditions and effects.
Incompatibility (materials to avoid): None Known.	Hazardous Polymerization: Will not occur.

SECTION 11.0 TOXICOLOGICAL INFORMATION

Occupationally Relevant Routes of Exposure

Inhalation: No information available	Skin: Not Available
Ingestion: No information Available	Eye: Not Available

Non-occupation Route of Exposure/Concerns

Intraperitoneal: Not Available	Intravenous Injection: Not Available
Reproductive Effects: Not Available	Subcutaneous Injection: Not Available

SECTION 12.0 ECOLOGICAL INFORMATION

This material is a solid and will partition itself to soils. This material is not regulated based on ecological concerns.

SECTION 13.0 DISPOSAL CONSIDERATIONS

Classified Under: This material is not regulated as a hazardous waste.	US EPA Waste Number: None
	International Waste Requirement/ Identifier: None
	State/Local Requirement/

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Identifier: None

Physical/Chemical Properties: This material is an inert solid.

Recommended Disposal Method: Dispose of in a non-hazardous waste landfill.

Empty Containers: Dispose of as non-hazardous waste. Bags or wrapping may contain residual dusts. Avoid dust generation when unwrapping.

SECTION 14.0 TRANSPORTATION INFORMATION

This product is not regulated under transportation guidelines either domestically, or internationally.

SECTION 15.0 REGULATORY INFORMATION

The listed substance(s) is regulated or advised on in accordance with the following regulatory acts or agencies

None Known

SECTION 16.0 OTHER INFORMATION

Acronyms:

ACGIH TLV	American Conference of Governmental Industrial Hygienist Threshold Limit Value
CAS No.	Chemical Abstracts Services Number
CERCLA	Comprehensive Environmental Response, Compensation, & Liability Act
CFR	Code of Federal Regulations
°C	degrees Celsius
°F	degrees Fahrenheit
IDLH	Immediately Dangerous to Life or Health
L	liter
LD ₅₀	Lethal Dose 50%
LDLo	Lethal Dose Low
CADS	Lower Explosive Limit
mg/kg	milligrams per kilograms
mg/m ³	milligrams per cubic meter
mmHg	millimeters of mercury
MSHA	Mine Safety & Health Administration
NA	Not Applicable
N.E.	None Established
NIOSH	National Institute of Occupational Safety & Health
OSHA PEL	Occupational Safety & Health Administration Permissible Exposure Limit
PNOC	Particulate Not Otherwise Classified
PNOR	Particulate Not Otherwise Regulated
PPM	Parts per million

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RQ	Reportable quantity
SARA	Superfund Amendment Reauthorization Act
UEL	Upper explosive limit
µg	microgram
µm	micrometer = 1/25,000 of an inch
UN	United Nations
US EPA	United States Environmental Protection Agency

OSHA 29 CFR 1910.1200
Suppliers MSDS/Product MSDS

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Date: Jan. 16, 2003

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