

## MATERIAL SAFETY DATA SHEET

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### SECTION I – CHEMICAL PRODUCT

Identity: **Firescoff® Ceramic Flux, Firecoat/Firescale Preventer, Heat Shield**  
Brand: **Firescoff®**

Hazard Rating: *Health:* 1 4=Extreme, 3=High, 2=Moderate, 1=Slight, 0=Minimal  
*Flammability:* 0  
*Reactivity:* 0

### SECTION II – COMPOSITION AND INGREDIENTS

**Ingredients/Chemical Name (May contain one or more of the following):** Water, antioxidant(s), ceramic matrix compound(s), non-metallic oxides, dissolution dispensing aid(s), cleaning agent(s), stabilizing agent(s)

Potentially Hazardous Ingredients as defined by  
OSHA, 29 CFR 1910.1200(g):

CAS	CONC	NIOSH
7664-38-2	< 4 %	1 mg/m <sup>3</sup> TWA

### SECTION III – HAZARDS IDENTIFICATION

#### Health Hazards (Acute and Chronic):

*Inhalation:* Aerosol mist may cause slight irritation to upper respiratory tract.  
*Ingestion:* May cause gastrointestinal irritation and electrolytic imbalance.  
*Eye Contact:* May cause eye irritation.  
*Skin:* May cause minor skin irritation.

#### Signs and Symptoms of Exposure:

*Inhalation:* May result in nausea, headache, and/or respiratory tract irritation.  
*Ingestion:* May result in nausea, vomiting, abdominal pain, and/or diarrhea.  
*Eye Contact:* May cause stinging, burning, tearing, itching, swelling, and/or redness.  
*Skin:* May cause minor itching, stinging, and/or redness.

### SECTION IV – FIRST AID INFORMATION

#### Emergency and First Aid Procedures:

*Inhalation:* Remove person to fresh air. Seek medical attention if symptoms persist  
*Ingestion:* Never give anything by mouth to an unconscious person. Do not induce vomiting. Drink 2 – 4 glasses of milk or water. Seek medical attention.  
*Eye Contact:* Flush thoroughly with water for 15 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek immediate medical attention.  
*Skin:* Rinse skin with water. If spilled on clothing, change clothes. Seek medical attention if symptoms persist.

### SECTION V – FIRE FIGHTING INFORMATION

**Extinguishing Media:** Substance is noncombustible. Use any fire-fighting agent appropriate for surrounding material.  
**Flash Point (Method Used):** N/A **Explosive Limits:** LEL: N/A UEL: N/A  
**Special Fire Fighting Procedures:** None **Unusual Fire Hazards:** None  
**Stability:** Stable *Conditions to Avoid:* None known **Incompatibility:** Strong oxidizers  
**Hazardous Polymerization:** Will not occur *Conditions to Avoid:* None known

### SECTION VI – ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** None  
**Environmental Precautions:** DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL REGULATIONS. Solutions may be allowed to be flushed down sewer. First check with your local water treatment plant. Please do not landfill.  
**Steps To Be Taken in Case Material is Released or Spilled:** Sorbents may be used. Read “Disposal Considerations” below for further information.

### SECTION VII – HANDLING AND STORAGE

**Precautions To Be Taken in Handling and Storage:** Avoid low temperature. **Shelf Life:** 2 years  
**Storage Temperature:** Recommended 72° to 120° F (25° to 49° C) **Other Precautions:** Store in closed container.

**SECTION VIII – EXPOSURE CONTROLS, PERSONAL PROTECTION**

**Respiratory Protection (Specify Type):** None required with normal use.

**Ventilation** *Local Exhaust:* None required with normal use.

*Special:* None

*Mechanical (General):* Normal/general dilution ventilation is acceptable.

*Other:* None

**Eye Protection:** None required with normal use.

*Industrial Setting:* For splash and liquid vapor protection, use chemical goggles. Eye wash fountain is desirable.

**Protective Gloves:** None required with normal use.

*Industrial Setting:* Protective gloves (nitrile, rubber, neoprene) should be used for prolonged direct contact.

**Other Protective Equipment:** None required with normal use. *Industrial Setting:* Avoid confined space entry without supplemental breathing air.

**SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES**

**Boiling Point °F:** N/A

**Appearance and Odor:**

**Specific Gravity (H<sub>2</sub>O = 1):** ca. 1.1

**Vapor Pressure (mm Hg):** N/A

Clear liquid / white ceramic powder coating.

**Freezing Point:** N/A

**Vapor Density (Air=1):** N/A

**pH (100% solution):** > 7 (basic)

**Evaporation Rate (nBuOAc=1):** N//K

**Solubility in Water:** Completely

**SECTION X – STABILITY AND REACTIVITY**

**Chemical Stability:** Stable under normal conditions. Rapid crystallization with heating. Absorbs oxygen and carbon dioxide from the air.

**Possible Hazardous Reactions/Conditions:** In very rare cases, may react with strong oxidizers, metal hydrides, or alkali metals generating hydrogen gas, which could create an explosion hazard.

**Materials / Conditions to Avoid:** Strong oxidizers

**Hazardous Decomposition Products:** May include inorganic metal and non-metal oxides.

**SECTION XI – TOXICOLOGICAL INFORMATION**

Water based ceramic fluxes have a low order of toxicity.

**SECTION XII – ECOLOGICAL INFORMATION**

In large quantity at high concentration, soluble ceramic compounds may cause damage to trees or vegetation by root absorption.

**SECTION XIII – DISPOSAL CONSIDERATIONS**

Chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**SECTION XIV – TRANSPORT INFORMATION**

Firescoff® contains no alcohol and is non-hazardous under DOT. This material approved for shipment via commercial passenger air-freight.

**SECTION XV – ADDITIONAL REGULATORY INFORMATION**

All components are listed on the US TSCA Inventory. No components are affected by Significant New Use Rules (SNURs) under TSCA §5.

No components of Firescoff® are subject to California Proposition 65 labeling.

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

**SECTION XVI – ECOLOGICAL INFORMATION**

\* N/A – Not Applicable

\* N/K – Not Known

The submission of this MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied is for use only in connection with occupational safety and health.

CAUTION: Brazing may produce fumes and gases hazardous to health. Avoid breathing these fumes and gases. Use adequate ventilation. See ANSI Z49.1, Safety in Welding and Cutting published by the American Welding Society, 550 N.W. 42nd Ave., Miami, FL 33126

**"The information herein is given in good faith, but no warranty, express or implied, is made."**