

Firescoff® Rh Step by Step



Gently heat jewelry to ~250°F (120°C).

Tip: Gage the temperature by placing a drop of water on the metal surface. Apply heat until the water boils off completely, then Firescoff® Rh.



Apply Firescoff® Rh at start of a repair to protect rhodium.

Spray Firescoff® Rh so that a fine mist coats the entire piece. When applied correctly, Firescoff® Rh will form a uniform white powder coating instantly on contact.

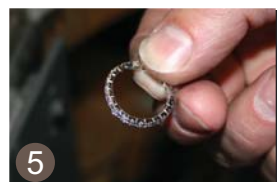


Gently reheat coated jewelry. Apply more Firescoff® Rh if a reflection from the metal is still visible.



Because Firescoff® Rh also performs as a flux, no other paste or liquid flux is required.

Tip: When using paste solder, apply paste solder first, then Firescoff® Rh.



Remove Firescoff® Rh coating after resizing or repair easily using just warm water, or ultrasonic bath. No acid pickle is required.



NOTE: At low temperatures, or if the bottle seal is broken, ceramic crystals may form at the bottom in the bottle. This may temporarily impact pump / spray performance. To return crystals back into solution, place the entire bottle in hot water or heated ultrasonic bath for 10-15 minutes.

Available at:



Krohn Industries, Inc.
303 Veterans Blvd
Carlstadt, NJ 07072
800.526.6299



MJSA Innovation Award Winner

9 out of 10 Bench Jewelers want Firescoff® Rh Flux to protect their jewelry during repairs

Firescoff® Rh

MJSA Award Winning
Ceramic Spray



Introducing Firescoff® Rh Ceramic coating technology that protects and prevents rhodium plated jewelry from turning black during resizings or repair. Avoid the need, time and cost required to strip and re-electroplate rhodium coatings.

The Firescoff® Rh Advantage

- Industry leading Rhodium protection
- Eliminates Rhodium stripping & buffing
- Save time and \$\$\$
- Multiple repairs w/ single application
- 75% reduction in repair time
- Maintains original metal color & patina
- Fluoride free (safe for corundum)
- Alcohol free (non flammable)
- No outgassing (Refer to MSDS)
- Replaces traditional firecoat & flux
- Easy warm water clean-up
- MJSA Award Winning ceramic technology!
- Toll Free 1-800 technical support



MJSA Innovation Award Winner

MATERIAL SAFETY DATA SHEET

MSDS #: 896223-00049-1 r1

Issue Date: 03/01/2008

SECTION I – CHEMICAL PRODUCT

Identity: **Firescoff® Rh Rhodium protection & Ceramic Flux**
Brand: **Firescoff®**

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

Emergency Telephone Number: 1-800-535-4980
Or call Local Poison Control Center or your physician

National Emergency Poison Control Hotline: 1-800-222-1222

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	NIOSH
7764-38-2	1 mg/m3 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 severe 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

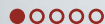
Emergency and First Aid Procedures:

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. Forcefully 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.

A Little *Firescoff® Rh*
Turns Pickle Green with Envy



Introducing NEW *Firescoff® Rh* - A revolutionary spray ceramic coating that prevents scale, acts as a flux, and comes off with just warm water. Lose the pickle, and



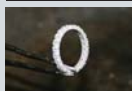
1 Start by gently heating jewelry to ~250°F (~120°C)
Tip: Gage the temperature by placing a drop of water on the metal surface. Apply heat until the water boils off, then apply *Firescoff® Rh*



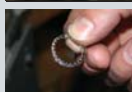
2 Spray *Firescoff® Rh* so that a fine mist evenly coats the entire piece. With proper heat, the *Firescoff® Rh* coating will instantly turn white. For best results, apply *Firescoff® Rh* holding the bottle ~8 inches from jewelry.



3 Gently reheat the coated jewelry. Apply additional *Firescoff® Rh* where a reflection from the metal or any gemstones is still visible.
Tip: For faster solder flow, apply more *Firescoff® Rh*



4 Because *Firescoff® Rh* is also a flux, no other paste flux is necessary.
Tip: When using paste solder, apply paste solder first then *Firescoff® Rh*



5 Remove *Firescoff® Rh* without the need of a pickle solution by using warm water or ultrasonic bath.

Questions? Call our tech line at 1-800-535-4980.



Nventa Incorporated, Scottsdale Arizona, www.Firescoff.com

Firescoff® Rh MSDS (Continued)

Page 2 of 2

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
Stability: Stable *Conditions to Avoid:* None known
Unusual Fire Hazards: None
Hazardous Polymerization: Will not occur *Conditions to Avoid:* None known
Incompatibility: Strong oxidizers

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:** 18 months
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:** Clear liquid / white ceramic powder coating.
Vapor Pressure (mm Hg): N/A **Specific Gravity (H₂O = 1):** ca. 1.2
Vapor Density (Air=1): N/A **Freezing Point:** N/A
Evaporation Rate (nBuOAc=1): N/K **pH (100% solution):** > 7 (basic)
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, low temperatures.
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® Rh 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® Rh 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.

The information contained herein has been compiled from sources considered by Nventa Incorporated to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific material designated herein, and does not relate to the use in combination with any other material or any other process. Nventa Incorporated assumed no responsibility for injury to the recipient or third persons, for any damage to any property resulting from misuse of the controlled product.