FGI – 391 Ice Release Coating

Unique Coatings – Extreme Results

Description

FGI-391 is an extremely unique ultimate performance single component Anti-Ice Release coating. It is formulated for ease of application in the field or at the point of manufacture. **FGI- 391** provides a very low coefficient of friction which provides a more difficult surface for moisture molecules to bond. **FGI-391** has tested down to 0.035µ which is excellent for a water base material. **FGI-391** also has a rating of 3.6 on the Centrifuge Adhesion Test (CAT) as performed at the Anti-Icing Materials Laboratory (AMIL). This is the highest rating for a permanent water based coating. **FGI-391** is not silicone based as silicone based materials have problems with UV degradation. **FGI-391** when properly applied leaves a film over the surface that reduces the chance of ice forming on the surface. If during extreme temperatures the moisture can freeze quickly, **FGI-391** provides a minimum holding surface for the ice particles. In turn a slight vibration, pulse or movement will dislodge the ice, releasing the weight and tension from the substrate. In many cases, the weight of the ice alone will cause it to drop or fall from the surface. **FGI-391** will bond to many substrates in a wide variety of climate conditions. **FGI-391** is extremely UV stable. **FGI-391** can be recoated as often as needed, no special preparation is necessary other than to clean and dry the surface to be coated. By reducing the coefficient of friction, water drops, snow, or ice will have less ability to hold onto the substrate, thus slipping off from the top surface of contact. While many coatings will micro crack and break down upon extended exposure to UV, **FGI-391** does not have this problem. Designed for ease of application and durability in a single component formula, **FGI-391's** cutting edge technology is continually tested under extreme conditions, both in the laboratory and in the field, with excellent performance. **FGI-391** provides a very cost efficient coating with high-end performance.

Features & Benefits

- **UV, Weather, Chemical, Salt and Abrasion Resistant**
- **Extreme Adhesion to Substrate**
- **Extremely Durable Wear Surface**
- **Air Cure System**
- **No Top-Coat necessary**
- **Contains No Zinc, Lead or Chromates**
- **Zero VOC's**

Some Recommended Uses for FGI-391

- **Electrical transmission lines and insulators**
- **Power line Support towers**
- **Cable, wires**
- **Snow and Ice removal equipment, vehicles, ATV, recreation equipment**
- **Aircraft, firefighting equipment**

Product Data Sheet FGI – 391 Ice Release Coating

- **Release coating surface for reduced building maintenance cost**
- **Reduces fuel consumption on vehicles with less drag**
- **Release coating for easy removal of any ice application, snow, mud and dirt**

FGI-391 Properties

- **Solids by Weight 30% +/- 2%**
- **Weight per gallon 9 lbs**
- **Film Thickness 0.25 to 1.0 mils**
- **VOC's 0.00 lbs per gallon**
- **UV Accelerates Weathering ASTM D 4587, 1500 hrs+**

Application Methods

For Brush, Wipe On or Dip Applications

1) Surface must be clean, dry and free of contamination. Apply by spray, brush, roller, or dip methods.
2) For example, use a clean dry lint free cloth for application. Moisten cloth with FGI-391 and apply directly to surface. Use overlap patterns to get complete coverage. Do not rub dry, apply a wet film of FGI-391. Liquid dries to a slight cloudy transparency.
3) Depending upon application and / or severe conditions, 2 or 3 coats may be required. Let first application set until dry to touch and apply additional coating as needed. Let dry and cure for 12 hours for maximum adhesion. For more porous substrates like concrete block, wood or composite, a second or third application may be needed for maximum water / ice shed properties. For short term performance, FGI-391 can be used immediately with just light recoats as needed. Repeat application as wear and release properties diminish.

FOR SPRAY ON APPLICATIONS

1) Surface must be clean, dry and free of contamination.
2) Standard spray, airless and manual (pump) equipment may be used with this product. Adjust volumes and pressures to yield best coverage rate for your specific need.
3) For multiple applications of FGI-391, let preceding layer dry to touch before the next application. This will help prevent runs and wasting of materials. Multiple thin coats are best for spray application to allow material to soak in and saturate substrate completely to provide maximum water / ice shedding properties.
4) For repair or recoats after base coating has been cured, make sure surface is clean and dry and repeat process 1-3 as stated above.

CLEAN UP: Use warm water and mild soap to clean equipment and tools. Always wear protective clothing and eyewear when applying any chemical. Consult the MSDS for proper handling of waste and spilled materials. Follow all local regulations regarding the use and handling of chemicals.

Keep container tightly closed when not in use, store in between temperatures of 45-80F. Do not allow to freeze or store around excessive heat. This will result in material failure.

Always spray coating in a well ventilated area or use a NIOSH approved self contained breathing apparatus or vapor filters on a mask. Protective gloves and safety glasses must be worn at all times. Only very high abrasion will remove the coating. Caution: With the extreme adhesion characteristics of this product all safety procedures must be followed. Be aware of over-spray so it will not land on any item that is not to be coated.

Please contact an *F G International* technician with questions on proper use and/or application.
Consult your MSDS information sheets for proper handling, disposal, and precautions while using this product.

Storage Stability & Shelf Life

The shelf life of **FGI-391** is **12 MONTHS FROM DATE OF SHIPMENT** when stored in original, unopened container. Store cans in a well ventilated and covered area away from extreme heat and moisture. Please contact your FGI representative if you have any questions about product usability.

F G International does not warranty the use or application of the materials it manufactures or supplies. Our only obligation shall be to replace any defective materials supplied by us or refund the original purchase price of that product after we have determined the product to be defective. We assume no liability for damages of any kind and the user accepts the product "as is" and without any warranties, expressed or implied. The suitability of the product and/or intended use shall be solely the responsibility of the user.
The information contained in this bulletin we believe to be correct to the best of our knowledge and testing. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that you make adequate tests in your laboratory or plant to determine if this product meets all your requirements.

Additional information is available at www.fginternational.net

Health, safety and environmental information are provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products. Before using the product other than directed, please contact FGI for consultation.

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