

# FGI – 7000 Fire Protection Coating

Unique Coatings – Extreme Results

## Description

FGI - 7000 is an extremely unique ultimate performance fire protection, chemical resistant, corrosion protection coating. An epoxy resin polyamide coating especially developed to withstand extreme fire temperatures, corrosive and abrasive conditions which quickly destroy conventional type protective paint coatings. The fire, chemical, abrasion and undercreep resistance characteristics of this product have proven so outstanding that it is considered to provide the most fire protection and also be the least expensive method for fire protection. FGI - 7000 is designed for adhering to almost any clean surface including: aluminum, wood, metals of all types, plastic, brick, glass, and transites. FGI-7000 can be used to coat cloth fabric making it highly fire resistant. When the fire touches the coating, the coating will add nothing to the combustion and will self-extinguish the fire in seconds, preventing it from spreading. The few surfaces FGI-7000 is not recommended for are Teflon, high-plasticized vinyls, polyethylene, and silicone rubber. FGI-7000 has excellent anti-corrosion qualities and hardness. Outdoor durability and color stability is excellent. FGI-7000 is extremely Weather, UV, Chemical, Salt, and Abrasion resistant providing for an unsurpassed durable wear surface with superior adhesion properties that promotes a nearly indestructible coating surface. FGI - 7000 requires little surface preparation thus reducing the time, labor and the TOTAL cost of your project.

### ASTM Test Battery:

ASTM B117 500 hour Salt fog test –Passed

ASTM 518 Thermal Conductance 2.61 BTU/ (h) (ft<sup>2</sup>) (F) Excellent

ASTM 518 Thermal Conductivity 0.0139 Btu(in)/(h)(ft<sup>2</sup>)(F), metric 0.002 w/m/K, Excellent

ASTM D-2240 Hardness 85 Shore Durometer

ASTM E108-91A UBC32-7 Class A Fire Rated

ASTM D-638 Tensile Strength 1393 PSI

ASTM E-96 Water Vapor Transmission 0.7 perms

ASTM G-53 500 hour accelerated weathering test, bend double with no cracking, highly flexible

ASTM 1640, D-92, D-1644A, D-2196, D-696, D-570, C-836, D-1652, D-1259

Flexibility is retained in sub-zero conditions (down to –92 F)

## Features & Benefits

- **Easy to Apply by Brush, Roller, Spray or Dipping on Dry or Wet substrates**
- **Very Little Prep Work over Rusty Metal**
- **Fire, UV, Weather, Chemical, Salt and Abrasion Resistant**
- **Extreme Adhesion to Substrate, adhering to almost any clean surface including: cloth fabric, foam, aluminum, wood, metals of all types, plastic, brick, glass, transites**
- **Extremely Durable Wear Surface**
- **No Top-Coat necessary**
- **Contains No Zinc, Lead or Chromates**
- **Typical Applications: Marine environments; fire protection for fabric, cloth, foam, building, electrical, marine, structural steel, automobiles, tanks, pipes, industrial and farm equipment, concrete floors and walls, decks, stairs, steps, railings, walls and ceilings of subways and any metal surface.**

### Application Methods

FGI - 7000 may be applied by brush, roller, spray or dipping. Surfaces should be free of loose rust, mill scale, paint, grease, oil and of any other film-forming foreign material. An example of the prep work needed is to water blast with high-pressure (3,000 psi MIN) water to thoroughly clean off all debris, dirt, and other contaminants. The result shall be to have a clean tight substrate. Optimum results are obtained if the surface is dry although entirely satisfactory protection is obtained if the surface is damp and/or wet. Surplus water should be removed to prevent excessive bubbling of the coating. No primer is needed on metal surfaces thereby reducing total job cost. Airless spray is the most efficient application method for larger projects. Brushes and rollers may be used for detail work such as edge termination, filling of voids, pinholes, and small cracks.

**MIXING:** Prior to combining Part A and Part B, mechanically mix Part A pail and Part B pail for 2 minutes, then thoroughly mechanically combine and mix (3 to 1 ratio) 3 Parts Base (part "B") with 1 Part Activator (part "A") for 5 minutes in the 5 gallon pail (or for 1 minute in one gallon pail), with a power mixer until all streaks and/or lumps disappear and the mixture has uniform color and consistency. Be sure to allow mixing blade to rub on sides and bottom of container to recombine any settling. Allow to stand (or ingest) for 45 minutes to one hour before adding thinner or beginning application. Use of thinner increases possibility of sag and reduces dry film thickness. Thinner also retards cure time. For best results, use just as it comes from the pail. However, thinner (use **new** lacquer thinner) can be added to the product with no harm to the coating. Thinning will necessitate applying more coats to achieve the desired mil thickness.

Any overspray and equipment must be cleaned immediately with acetone, toluene, xylene, or MEK.

FGI-7000 is 90% solids. Approx.Pot Life: 4 to 6 hours at 80 F. Drying time 1 to 2 hours at 80 F. Curing time: Initial: 8 hours at 80 F, Complete: 3 days at 80 F. Mileage is dependant upon application. Example: Apply 3.3 mils (.003 inches or 0.083 mm) wet to achieve a final dry mil thickness of 3 mils (0.003 inches or 0.076 mm). FGI-7000 will cover approximately 480 square feet (44.6 sq meters) per gallon at 3 mils thickness. If second coat is needed wait till first coat is tacky dry, usually one to two hours in 80 F, The second coat may be applied at 2.2 mils (0.00220 inches or 0.056 mm) wet to achieve a dry mil thickness of 2 mils (0.002 inches or 0.050 mm). This second coat will cover any voids in the surface due to a very rough surface. Max of 12 mils (0.012 inches or 0.3 mm) can be applied per coat without runs if necessary. Cloth Fabric: 2 to 3 mils dry for fire protection.

Use in well ventilated area; if not possible, 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.

Customers should consult FGI on all special requirement installations.

### Storage Stability & Shelf Life

The shelf life of FGI-7000 is one year 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.

The information contained in this bulletin we believe to be correct to the best of our knowledge and testing. 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](http://www.fginternational.net)

## Product Data Sheet

## FGI – 7000 Fire Protection Coating

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.

F G International, LLC  
33717 Hwy 23  
Collins, Ga. 30421, USA  
Email: [info@fginternational.net](mailto:info@fginternational.net)  
Tel: +1.912.684.2283  
Fax: +1.630.604.7984