

## FMJ-4800 Ceramic Fluid Grade

### **PRODUCT FEATURES & BENEFITS:**

FMJ Enterprises specialty coatings are providing the best in corrosion protection, while being safe for our environment and totally user friendly.

FMJ-4800 is a 100% solids, two component, novolac coating designed for maximum heat and chemical resistance. Excellent coating for tanks, tube sheets, impellors, water boxes, and resurfacing pump housings.

- ➤ 100% Solids, No VOCs
- Excellent chemical resistance
- Maximum heat resistance
- Excellent wear resistance

### **SURFACE PREP:**

Surfaces must be prepped by removing all surface contaminates and then grit blast to obtain a NACE No. 1 (SSPC-SP5) or 3 mil profile. Sweat/Bake oily chemical saturated pieces before blasting. This process should be repeated until all salts are removed.

### **MIXING & APPLICATION:**

FMJ-4800 is a two component material mixed 3:1 by volume. The two components should be thoroughly mixed. Apply by brush, applicator, or gloved hand and followed with a stiff brush.

### **MULTIPLE COATS:**

Second and subsequent coats must be applied before the previous coat has completely cross-linked. Apply additional coats when the previous coat will still string out (pigtail) and hold its shape when touched. If any light

tack remains, allow the product to cure, then brush blast before applying the next coat.

The same requirement applies when overlapping the seams of adjacent coating section to create a continuous protective film. If the coating surface to be overlapped at the seam cannot be brush blasted, use a non-impact means such as power brushing or sanding to create a mechanical profile.

### **PHYSICAL PROPERTIES:**

PHISICAL PROPERTIES:	
Color	Light Grey, Dark Grey
Coverage per 800 gm	16 sq.ft. @ 12 mils thickness
(Theoretical)	
Mix Ratio by Volume	3:1 (Resin: Hardener)
Flash Point	>250°F (121°C)
Pull-Off Adhesion Test ASTM D 4541	Minimum adhesion is 2800 psi
Coefficient of Thermal	1.8
Expansion	
(10-6/per °F)	
Recommended Thickness	2 coats @ 12 mils each; for high
	temps/severe chemical 3-4
	coats @ 12 mils each
Specific Gravity	Resin: 1.51 Hardener: 0.95
Volatile Organic	0 grams/liter
Compounds (VOC)	
Weight per unit	1.76 lbs
Flash Point	>250°F (112°C)
Compressive Strength	14350 psi
ASTM D695	
Flexural Strength	8490 psi
ASTM D790	
Hardness	90
ASTM D785	

### CURE TIME (68°F):

Working Time	40 minutes
Re-coat Window	1-1 ½ hours
Touch Dry	12 hours
Immersion (Aqueous)	30 hours
Service	
Full or Chemical Service	7 days

### "Put A Jacket On It"™

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NOTE: Do not keep the blended coating in the original container unless immediate use is planned. Otherwise, exotherm heat created during the curing process will considerably shorten the pot life. Pour the coating into a rolling tray or large aluminum basting pan. Try to keep the depth of the coating in the tray below 3/8".

### **SERVICE TEMPERATURE:**

Dry Service	450°F (232°C)
Spill/Splash	360°F (182°C)
Immersion Service*	300°F (149°C)

<sup>\*</sup>Immersion with solvents, mineral acids, or alkalines, or if over 150°F, contact Distributor.

### **CHEMICAL RESISTANCE:**

- Ammonium Hydroxide
- Aromatic & Aliphatic Solvents
- Benzene
- Black Liquor
- Butyl Acetate
- Butyl Carbitol
- Chlorinated Solvents
- (except Methylene Chloride)
- Chlorides
- Hydrochloric Acid (up to 35%)
- Hydrogen Sulfide
- MEK

- Mineral Acids
- Nitric Acid (up to 30%)
- Organic Acids (many)
- Phosphates
- Phosphoric Acid
- Potassium Hydroxide
- Sodium Hydroxide
- Sulfides
- Sulfuric Acid (up to 98%)
- Toluene
- Urea Solutions
- White Liquor

### **ORDERING INFORMATION:**

For additional information, prices, or to place an order, please contact your Full Metal Jacket sales representative.

## FMJ Enterprises, LLC

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