Data Sheet



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-8100 is a 100% solids, two component, superior high performance novalac epoxy system for long term chemical exposure in tank linings. Our FMJ-8100 is a cross-linked ceramic filled coating designed to withstand elevated temperatures and maximum chemical resistance. It provides excellent wear and is self priming to metal surfaces. Bond strength is unsurpassed. FMJ-8100 is suitable for metal & concrete protection.

- > 100% Solids, No VOCs
- Excellent chemical & heat resistance
- Metal or Concrete

SURFACE PREP:

Metal 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.

Concrete surfaces must be abrasive blasted/water blasted to remove chemical contaminates and loose surfaces then allowed to dry. New concrete, allow to cure 28 days.

MIXING & APPLICATION:

FMJ-8100 is a two component material mixed 3:1 by volume. The two components should be thoroughly mixed. Apply by brush, roller or squeegee. Can also be sprayed with high pressure pumps.

MULTIPLE COATS:

Second and subsequent coats must be applied before the previous coat has completely cross-linked. If 2 or more coats are required, apply the coating within the re-coat window (see table below). 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:

| Color | Red / Grey |
|---|------------------------------|
| Mix Ratio by Volume | 3:1 (Resin: Hardener) |
| Adhesion to concrete – Pull off test | Substrate Failure = PASS |
| Pull-Off Adhesion Test ASTM D 4541 | Minimum adhesion is 1900 psi |
| Recommended Thickness | 2 coats @ 12-15 mils each |
| Specific Gravity | Resin: 1.64 Hardener: 1.06 |
| Volatile Organic Compounds (VOC) | 0 grams/liter |
| Coefficient of thermal expansion (10 ⁻⁶ /per ⁰ F) | 1.4 |

CURE TIME (68°F):

| Working Time | 30 minutes |
|--------------------------|---------------|
| Re-coat Window | 1 ½ - 2 hours |
| Touch Dry | 12 hours |
| Immersion (Aqueous) | 30 hours |
| Service | |
| Full or Chemical Service | 7 days |



FMJ-8100 Ultimate Chemical Liner

SERVICE TEMPERATURE:

| Dry Service | 300°F (149°C) |
|--------------------|----------------|
| Spill/Splash | 250°F (112°C) |
| Immersion Service* | 200°F (93.5°C) |

^{*}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
- Chromic acid (up to 30%)
- Hydrochloric Acid (up to 36%)
- Hydrofluoric Acid (up to 8%)
- Hydrogen Sulfide

- Lithium Chloride
- Mineral Acids
- Nitric Acid (up to 10%)
- Organic Acids (many)
- Phosphates
- Phosphoric Acid (up to 100%)
- Potassium Hydroxide*
- Sodium Hydroxide*
- Sulfides
- Sulfuric Acid (up to 98%)
- Toluene
- White Liquor

ORDERING INFORMATION:

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

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