CHEMFIT PERMACOR 2706EC

Two Part, Solvent Based Epoxy Primer Containing MIO – For the Protection of Galvanized Steel, Stainless Steel, Aluminum & Zinc Metal Sprayed Surfaces

PRODUCT DESCRIPTION

ChemFit Permacor 2706EC is a high-performance, two-part, solvent-based epoxy primer formulated with **Micaceous Iron Oxide (MIO)**. This specialized pigmentation provides a barrier effect with a "leafing" structure that creates a tortuous path for moisture and oxygen, significantly enhancing the anti-corrosive properties of the coating system. It is specifically engineered to provide excellent adhesion to non-ferrous metals such as galvanized steel, stainless steel, aluminum, and zinc metal sprayed surfaces, which are often difficult to coat.

The primer is designed for use in aggressive environmental conditions, offering high chemical resistance, excellent durability, and outstanding cathodic disbondment protection.

PRIMARY APPICATIONS

ChemFit Permacor 2706EC is recommended for use in conditions such as:

- Protective primer for galvanized steel structures, handrails, and sheeting
- Adhesion promotion layer on stainless steel in industrial or architectural applications
- Primer for aluminum surfaces in marine or chemical environments
- Base coat for zinc metal sprayed (metallized) surfaces requiring long-term protection
- As a high-performance primer in multi-coat paint systems for bridges, offshore installations, and industrial plants
- Touch-up and repair of damaged galvanized coatings

KEY FEATURES AND BENEFITS

- **Contains MIO** – Provides a barrier effect that extends coating life and reduces corrosion creep
- **Excellent adhesion** – Specifically formulated for the challenging surfaces of galvanized steel, stainless steel, and aluminum
- **Two-part epoxy** – Cures to a hard, chemically resistant film
- **High chemical resistance** – Withstands industrial chemicals, salt spray, and environmental pollutants
- **Good flexibility** – Minimizes cracking during thermal cycling of metal substrates
- **High build** – Allows application of thick films in fewer coats
- **Edge retention** – MIO enhances film strength and sharp edge coverage
- **Conforms to EN ISO 12944** – Suitable for high corrosion categories (C4, C5, CX)

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance / Color	Part A: Grey; Part B: Transparent to amber
Color (mixed)	Grey (MIO gives slight sheen)
Basis	Two-part, solvent-based epoxy resin with MIO
Solids by Volume	Approx. 55% - 65%
Density (mixed)	Approx. 1.4 - 1.6 kg/L
Mix Ratio (by weight)	Refer to product label (Part A : Part B)
Pot Life (at +20°C)	2 – 4 hours
Touch Dry (at +20°C)	3 – 5 hours
Overcoat Time (at +20°C)	Minimum: 6-8 hours / Maximum: 5 days
Full Cure	7 days
Application Temperature	+5°C to +40°C
Substrate Temperature	Must be ≥3°C above dew point

MECHANICAL PROPERTIES

Property	**Value**
Adhesion (Cross cut/ Pull-off)	Excellent (passes tape test on prepared galvanized surface)
Flexibility (Mandrel)	Passes conical mandrel bend
Impact Resistance	Good (Passes reverse impact test for primer)
Salt Spray Resistance	Excellent (> 1000 hours for full system)
Edge Coverage	Enhanced due to MIO pigmentation

PACKAGING AND STORAGE

Packaging:

- Part A: 20 kg container
- Part B: [Specific Weight] kg container (Check label for ratio)

Storage:

- Store in original sealed containers at +10°C to +30°C
- Protect from direct sunlight, moisture, and freezing
- Store in dry conditions

Shelf life: 12 months from date of manufacture when stored properly in unopened containers.

DOSAGE AND COVERAGE RATE

- **Theoretical Coverage:** Varies with dry film thickness (DFT).
- **Estimate:** At 50 microns DFT, approx. 8 – 10 m^2/L.
- **Calculation:** Consumption (kg/m^2) = (DFT in microns) x (Density in kg/L) / (10 x % Solids by Volume).

Please refer to the product label for the most accurate solids content and specific coverage for your desired DFT.

APPLICATION GUIDLINES

Surface Preparation:

- Substrate must be clean, dry, and free from dust, oil, grease, and salts
- **Galvanized/Sheradized Surfaces:** Degrease and sweep blast (to achieve a surface profile of ~30-50 microns) or use a chemical etch treatment (T-Wash) to remove the passivation layer
- **Zinc Spray/Zinc Rich Primers:** Clean and remove any loose zinc salts
- **Non-Ferrous Metals (Aluminum/Stainless):** Degrease and abrade using fine abrasive (e.g., aluminum oxide) to provide a mechanical key
- Mix Part A and Part B according to the label ratio

Mixing:

- Pre-mix Part A thoroughly before combining
- Add Part B to Part A and mix with a low-speed drill (300-400 rpm) for 2-3 minutes until uniform
- Pour into another container and mix again to ensure thorough blending
- Use within the pot life (approx. 2-4 hours at +20°C)

Application:

- Apply by brush, roller, or airless spray
- For galvanized steel, apply at the specified DFT (typically 40-80 microns). Avoid applying too thickly on smooth surfaces to prevent mud-cracking
- Maintain a wet edge to avoid lap marks

Curing:

- Overcoat with specified polyurethane or epoxy topcoats within the recoat window (typically 6 hours to 5 days at 20°C)
- Full cure (chemical resistance): 7 days
- Do not apply below +5°C or if relative humidity exceeds 80%
- Do not apply if substrate temperature is below dew point (+3°C margin)

HEALTH AND SAFETY

Epoxy resins and hardeners may cause skin and eye sensitization. MIO dust may be generated during mixing. If eye contact occurs, rinse with water for 15-20 minutes, seek medical attention. Skin contact: wash with soap and water. Use nitrile gloves, safety glasses, and protective clothing. Ensure adequate ventilation – use respiratory protection if ventilation is poor. Refer to the Safety Data Sheet for detailed information.

CLEANING OF TOOLS

Clean all brushes, rollers, and equipment with xylene, acetone, or epoxy thinner immediately after use. Dried material requires mechanical removal.

APPROVALS AND STANDARDS

ChemFit Permacor 2706EC complies with the following standards:

- **EN ISO 12944** – Suitable for high corrosion protection categories
- **SSPC Paint 36** – Two-component epoxy zinc-rich primer (type II or III depending on zinc level)
- **ENI 20000** – Conforms to the specified standard for performance or composition (as noted in product title)
- **ISO 9001** – Quality management system certified
- Two part, solvent based epoxy primer containing MIO
- Suitable for protecting galvanized steel, stainless steel, aluminum, and zinc metal sprayed surfaces

LEGAL NOTES

All technical data provided in this Product Data Sheet is based on laboratory testing under controlled conditions. Actual field performance may vary due to differences in substrates, application methods, site conditions, and environmental factors. ChemFit makes no warranty of merchantability or fitness for a particular purpose. Users shall conduct their own trials to validate product suitability for the intended application. ChemFit reserves the right to modify product specifications without prior notice. For the most current documentation, request the latest Product Data Sheet and Safety Data Sheet from ChemFit.

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