

CHEMFIT ZINCRICH 3200

Two Component Cold Curing Zinc Rich Epoxy Primer, Quick Drying, Weldable – Anti-Corrosive Primer for Iron, Rebars & Steel Structures

PRODUCT DESCRIPTION

ChemFit ZincRich 3200 is a two component, cold curing, zinc rich epoxy primer designed as an anti-corrosive, quick-drying, and weldable primer for various steel protection systems. This high-performance primer utilizes a high concentration of zinc dust in the dry film to provide active cathodic protection to the underlying steel substrate. It offers excellent adhesion, outstanding rust-inhibiting properties, and is resistant to weathering and abrasion. The product is formulated in a convenient, pre-weighed pack for easy on-site mixing. This primer is suitable for shop and field application and is compatible with a wide range of topcoats.

PRIMARY APPLICATIONS

ChemFit ZincRich 3200 is recommended for use in conditions such as:

- Anti-corrosive primer for iron, re-bars, and steel structures
- Primer for steel surfaces in aggressive atmospheric and industrial environments
- As a primer in multi-coat paint systems for bridges, storage tanks, and offshore structures
- Provides a weldable coating for fabricated steel components

KEY FEATURES AND BENEFITS

- **Two component, cold curing** – Easy to use, pre-weighed pack ensures a correct mix ratio
- **Zinc rich** – High zinc content provides cathodic protection to the steel substrate
- **Quick drying & weldable** – Dries quickly to a film that can be welded through without burning back excessively
- **Excellent anti-corrosive properties** – Outstanding rust-inhibiting properties
- **Good adhesion** – Excellent adhesion to properly prepared steel, and also promotes excellent adhesion between reinforcement bars and concrete
- **Good resistance** – Resists water, weathering, and abrasion

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance / Colour	Part A: Grey liquid; Part B: Grey liquid; Mixed: Metal grey
Basis	Two component, epoxy modified zinc-rich primer
Mix Ratio (by weight)	Part A : Part B = 5 : 1
Pot Life (at +20°C)	~4 hours
Dry to Touch (at +20°C)	40 minutes
Dry to Recoat (at +20°C)	100 minutes
Full Cure	7 days
Application Temperature	+10°C to +40°C (steel must be min. +10°C)
Substrate Temperature	Must be $\geq 3^{\circ}\text{C}$ above dew point
Density (mixed)	~1.78 kg/L

PACKAGING AND STORAGE

Packaging:

- 5 kg pack (Part A + Part B ready-to-mix unit)

Storage:

- Store in original, sealed containers in dry conditions, away from direct sunlight, at temperatures between +5°C and +35°C
- Keep containers tightly sealed when not in use

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

DOSAGE AND COVERAGE RATE

The theoretical consumption of this primer is approximately **180 g/m² for 25 µm DFT** . The following table provides coverage estimates.

Dry Film Thickness (DFT)	Theoretical Consumption	Coverage per 5 kg unit
25 microns	180 g/m ²	~28 m ²
50 microns	360 g/m ²	~14 m ²
75 microns	540 g/m ²	~9 m ²
100 microns	720 g/m ²	~7 m ²

APPLICATION GUIDELINES

Surface Preparation:

- Substrate must be clean, dry, and free from all contaminants such as dust, oil, grease, and rust
- For optimum performance, steel surfaces must be blast cleaned to a near-white metal finish (e.g., ISO 8501-1 Sa 2½) to provide a suitable surface profile
- Remove any weld spatter and smooth sharp edges

Mixing:

- Thoroughly stir the base component (Part A) before use
- Add the entire contents of the hardener (Part B) to the base
- Mix with a low-speed drill (300-400 rpm) for 2-3 minutes until a uniform color is achieved
- Use within the pot life (approx. 4 hours at 20°C)

Application:

- Apply by brush, roller, or conventional/airless spray equipment
- For best performance on structural steel, apply a single coat at a wet film thickness (WFT) sufficient to achieve the specified DFT
- Avoid applying too thickly in one coat; apply two thinner coats if a high DFT is required

Curing:

- The primer will be dry to touch in approximately 40 minutes at 20°C
- It can be overcoated after 100 minutes at 20°C
- Do not expose the primer to water, chemicals, or mechanical stress before it is fully cured (approx. 7 days)

Limitations:

- Do not apply when the temperature is below +10°C or if the relative humidity is above 80%
- Do not apply if the substrate temperature is below the dew point (+3°C margin)
- Protect from water, condensation, and physical damage during the curing process

HEALTH AND SAFETY

Epoxy resins and hardeners may cause skin and eye sensitization and irritation. If eye contact occurs, rinse immediately with plenty of water for 15-20 minutes and seek medical attention. For skin contact, wash immediately with soap and water; remove contaminated clothing. Use gloves (nitrile), safety glasses, and protective clothing during handling. Ensure adequate ventilation. Refer to the Safety Data Sheet for detailed information.

CLEANING OF TOOLS

Clean all equipment with a suitable solvent (e.g., xylene or acetone) immediately after use before the material cures. Dried material requires mechanical removal.

APPROVALS AND STANDARDS

ChemFit ZincRich 3200 complies with the following standards:

- Conforms to **SSPC-Paint 20, Level 2** (Zinc Dust Level Classification)
- **ASTM D520 Type II** – Zinc dust pigment for paint
- Two component, cold curing, zinc rich epoxy primer
- Quick drying and weldable
- Suitable as an anti-corrosive primer for iron, rebars, and steel structures

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.

CHEMFIT CONSTRUCTION CHEMICAL AND SERVICES LIMITED

Office No. 8, 1KM Near Gaey Soap, Sargodha Road, Faisalabad

Tel: +923364544837

Web: www.chemfitchemical.com

Email: chemfit.pro@gmail.com