BERGER PROTECTON
PROTECTIVE COATINGS DIVISION

# Epilux FRX Anticorrosive Coating

## Two Pack Epoxy Primer

Issue Date : Feb 2025

### Product Description

A two pack high solid Epoxy Primer containing high level of Zinc Phosphate anticorrosive pigment. The easy to apply primer can develop high thickness and offers excellent protection to steel when applied in a system. It is compatible with a wide range of top coats.

### Usage Areas

Recommended for use as an excellent anticorrosive primer for structural steel work, tanks, vessels, pipelines in Fertilizer, Refinery, Petrochemical and Chemical Plants. Installation exposed to Marine atmosphere will have maximum life span using paint system with Epilux FRX.

### Product Data

| | |
|---|---|
| Composition | Epoxy Resin cured with Phenalkamine hardener, fortified with Zinc Phosphate. |
| Volume Solids | 63 ± 3% |
| VOC | 320 gms/ltr |
| Mixing Ratio | Base : Catalyst :: 6:1 (V/V) |
| Application Method | Brush, Airless Spray |
| Recommended DFT | 75-150 µ per coat |
| Corresponding WFT | 119-238 µ per coat |
| Theoretical Spreading Rate | 4.2 to 8.4 m²/Ltr/Coat |
| Colour | Grey / Red Oxide |
| Finish | Low Sheen |

Practical Coverage : Dependent on-site condition and transfer losses due to substrate design, profile, wind, heights, application method, painter's skill etc.

### Pot Life

| 10°C | 15°C | 25°C | 40°C |
|---|---|---|---|
| 6 hrs | 5 hrs | 4 hrs | 2 hrs |

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## Typical Coating Systems

**Systems compatibility can be provided on request to the Technical Service Team**

| Coats | Generic Systems | Compatible Products |
|---|---|---|
| Primer | Epoxy FRX | Epilux FRX A/C Coating |
| Mid Coat | Epoxy MIO, TiO2 | Epilux 155 HB, Epilux 4 HB Epoxy, Epilux 950 Super |
| Top Coat | Epoxy, Polyurethane | Epilux 155 HB, Epilux 4 HB Epoxy, Bergerthane Finish |

## Pack size

| | UOM | Part A | Part B | Total |
|---|---|---|---|---|
| Volume | Lt/Kg | 18 ltr | 3 ltr | 21 ltr |

## Storage

The paints must be in its sealed original containers and be kept under cover in a dry place with ambient conditions inside closed room until use. The curing agent is sensitive to moisture and hence relative humidity within the room should be maintained preferably at ≤55%. Stacking should not be more than 3 drums/ cartons one above other. DO NOT expose to direct rain/ sunlight. Any deviation to the defined storage condition shall have a negative effect on the shelf life.

## Shelf life

Up to 12 months as long as the sealed original containers are kept under cover in a dry place under normal temperature conditions until use.

Note :

1. Storage life @23°C will be extended up to 24 months. Storage at elevated temperatures may reduce shelf life; and hence never exceed maximum room temperature of 40°C. Storage life, thereafter, subject to re-inspection; consult tech-service.
2. It may be noted that higher volume solid material will tend to soft settling on long term storage, and it can made to a normal homogeneous consistency by use of a slow speed 200-400 rpm power stirrer particularly in the PART A (BASE) container; and this soft settling is not considered as a failure of keeping properties.

## Flash Point

| Part A | Part B | Mixed Paint |
|---|---|---|
| 22°C | 22°C | 22°C |

## Health & Safety

Please refer to the separate Safety Data Sheet available with detailed information.

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APPLICATION GUIDELINE

| | | |
|---|---|---|
| **Substrate** | Mild Steel. | |
| **Surface preparation** | **Mild Steel :** Remove grease, oil and other contaminants preferably by using Solvent Cleaning as per SSPC SP1. Abrasive Blast clean to a minimum SSPC SP10, with a surface profile of 50 - 65 microns.. For severe corrosive conditions, blast clean to SSPC SP5 Special care must be taken on weld areas to remove flux and spatter; welds should be ground back to avoid pockets. The cleaned surface should be dry and free of dust. The coating to be applied before the surface gets contaminated. SSPC SP3 is recommended for repair jobs and the same primer may be used by brush painting. Stripe coat is recommended on all edges, angle, corners, pitted, welded areas. | |
| **Atmospheric Condition** | Ventilation | Suitable air engineering systems, which will ensure reduction of air contaminants and thatto further help regulate the temperature and humidity of the working environment. |
| | Dew Point | Ensure surface temperature to be more than 3°C over the dew point temperature. |
| | Humidity | Do not apply when relative humidity rises above 85%. |
| **Mixing** | Stir the base thoroughly and then mix base to a homogenous liquid and then add recommended part of catalyst to uniform consistency. Allow the mixture to mature for 15 minutes and stir again before and during application.<br>NOTE : Stir the base thoroughly and then mix base to a homogenous liquid and then add recommended part of catalyst to uniform consistency. Allow the mixture to mature for 15 minutes and stir again before and during application. | |
| **Thinner** | Thinner 844 | |



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## Application

Stir the contents of each can thoroughly with a broad flat stirrer. Mix the components in the recommended ratio using power mixer. Mature for 15 to 20 minutes and stir again before and during application.

**Brush :** Apply preferably without thinning. When brushing, additional coats may be required to attain the specified thickness.

**Conventional Spray :** Maximum upto 10% Thinner 844 may be added depending on conditions to help atomisation. Use equivalent to De Vilbiss JGA 502 Gun with 704 Air Cap, E Fluid Tip and Needle.

**Pressure at Pot :** 10 to 15 psi **Pressure at Gun :** 55 to 60 psi.

**Airless Spray :** Add maximum upto 5% Thinner 844 if absolutely essential. Use any standard equipment with pump ratio 55:1 and a fluid tip of 17-21 though (0.43-0.53) and air supply of 80-100 psi.

## Work Stoppage

Ensure to use the mixed paint within pot life as there are no methods to increase working pot life. Keep the working tools and tips free of drying and clogging. Always use fresh material and never add-up to previous mixed paints.

## Clean Up

Clean all equipment immediately after use with thinner 844. It is good working practices to flush or clean all the spray equipment periodically. All the surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations.

## Drying Time

| Temperature | Touch dry | Handle dry | Hard dry |
|---|---|---|---|
| 10°C | 4 hrs | 16 hrs | 24 hrs |
| 23°C | 2 hrs | 10 hrs | 16 hrs |
| 30°C | 1 hrs | 8 hrs | 12 hrs |
| 40°C | 50 mins | 6 hrs | 8 hrs |

## Over Coating Intervals

| | @23°C | @30°C |
|---|---|---|
| MIN | 12 hrs | 16 hrs |
| MAX | 1 month | 1 month |



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|---|---|
| **Curing Time** | 7 days<br>NOTE : Drying and Curing times are determined under controlled temperatures and at relative humidity below 85%, for the NDFT of the product. |
| **Inspection** | Refer SSPC PA2 guidelines for measurement of DFT.<br>Do not conduct any destructive test like peel off/ pull off & high voltage Holiday test unless and otherwise mandatory in the specification.<br>Consult Technical Service team for preparation of QAP (Quality Assurance plan). |
| **Repair Methodology** | Clean off loose paints, debris, contaminants and ensure spot repair with available tools as practiced in hand/ power tool cleaning using wire brush/buffing, emery/feathering to smoothen the edges of impaired areas. Use appropriate touch up primer followed by recommended coating system, allowing due over coating interval time to area of 2-3 inches in excess of the spot repaired portion. |
| **Product Characteristics** | • Epilux FRX Anticorrosive Coating exhibits very good resistance to Acids when exposed to splashes, spills and good when exposed to mild fumes.<br>• Excellent resistance to Solvents & Alkalis when exposed to mild fumes and very good when exposed to splashes, spills.<br>• Excellent resistance to Salt & Water when exposed to splashes, spills and mild fumes.<br>• Excellent weatherability can be achieved with suitable top coats.<br>• The material exhibits excellent abrasion resistance.<br>• The temperature resistance is 93°C for continuous use and 120°C for intermittent use. |
| **Disclaimer** | The information contained within this Data Sheet is based on information believed to be reliable at the time of its preparation. The Company will not be liable for loss or damage howsoever caused including liability for negligence, which may be suffered by the user of the data contained herein. It is the users' responsibility to conduct all necessary tests to confirm the suitability of any product or system for their intended use. No guarantee of results is implied since conditions of use are beyond our control. |