

# KRYPTON PROLINE MFE100



Multifunctional, surface-tolerant epoxy, immersion

## DESCRIPTION

Krypton ProLine MFE100 is a multi-purpose, surface-tolerant epoxy. Specially formulated as a high-performance coating for the protection of metal structures, industrial facilities, bridges, tanks, pipes, containers, areas subject to condensation, marine environments, etc.

It can be applied to damp surfaces.

An excellent product for the maintenance and protection of bridges or floodgates.

Suitable for immersion and for concrete.

Aluminium and micaceous iron oxide (MIO) versions.

## PROPERTIES

- Excellent performance for new construction and maintenance.
- Can be applied to surfaces that have not been thoroughly prepared; allows for manual surface preparation (ST2), mechanical preparation (ST3), as well as *water jetting*, even on damp surfaces.
- Suitable as a primer, intermediate coat and topcoat (in indoor areas).
- Excellent corrosion resistance.
- Resistance to abrasion, splashes and spills.
- Suitable for immersion in water.
- Compatible with most existing coatings.
- Very good resistance to condensation and high humidity.
- Can be applied to rusted surfaces where the rust is firmly adhered.
- Cures perfectly over a wide temperature range, even below freezing, without the addition of external curing agents to the coating.
- Can be immersed 30 minutes after application.
- Can be applied in thick coats.
- High solids by volume, low VOC content.

## TECHNICAL DATA

| Appearance           |                                                                                                                                                           |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Finish               | Semi-gloss                                                                                                                                                |
| Colour               | RAL colour and aluminium                                                                                                                                  |
| Material properties  |                                                                                                                                                           |
| Components           | 2                                                                                                                                                         |
| Mixing ratio         | Resin: 3 parts<br>Curing agent: 1 part                                                                                                                    |
| Pot life             | 2 hours at 20°C                                                                                                                                           |
| Volume solids        | 87% (ISO 3233)<br>Variations of $\pm 3\%$ may occur depending on the colour                                                                               |
|                      | Aluminium colour: 79% (ISO 3233)                                                                                                                          |
| Specific gravity     | 1.36 g/L – 1.49 g/L                                                                                                                                       |
| Dry film thickness   | 100 $\mu\text{m}$ – 300 $\mu\text{m}$ per coat<br>When applying with a brush or roller, additional coats may be required to achieve the desired thickness |
| Number of coats      | 1–2                                                                                                                                                       |
| Theoretical coverage | 8.7 $\text{m}^2/\text{L}$ at 100 $\mu\text{m}$<br>Application losses must be taken into account                                                           |
| Application method   | Airless spray gun, conventional spray gun, brush or roller                                                                                                |

## DRYING TIME

| 200 $\mu\text{m}$          | 30°C     | 20°C     | 10°C     | 0°C      |
|----------------------------|----------|----------|----------|----------|
| To the touch               | 1h 30min | 3h       | 6h       | 12 noon  |
| Deep dry                   | 4 hours  | 6 hours  | 12 hours | 24 hours |
| Minimum recoating interval |          |          |          |          |
| ProLine MFE100             | 1h 30min | 3h       | 6h       | 12h      |
| Krypton 2K Topcoat         | 4 hours  | 6h       | 12 hours | 24h      |
| Maximum recoating interval |          |          |          |          |
| ProLine MFE100             | 2 months | 2 months | 2 months | 2 months |
| Krypton 2K Topcoat         | 2 months | 2 months | 2 months | 2 months |

Note: Drying times depend on temperature, ventilation and film thickness.

For further details, please contact Krypton's Technical Department.

## PAINTING SYSTEMS

### Steel:

Krypton ProLine MFE100 can be applied directly to the substrate or as an intermediate coat over itself or other epoxy primers such as polyurethane.

### Concrete:

Apply two coats of Krypton ProLine MFE100. Apply the first coat diluted to 20–25%. The final dry film thickness should be approximately 150–200  $\mu\text{m}$ .

For immersion coating, on both steel and concrete, apply Krypton ProLine MFE100 in two or three coats with a minimum total dry film thickness (DFT) of 400  $\mu\text{m}$ .

## SUBSTRATE PREPARATION

The performance of the coating system is proportional to the degree of surface preparation.

### Steel:

Remove rust, dirt, grease and other contaminants depending on the required degree of cleanliness. The choice of surface preparation will depend on the selected system and the final use and service conditions.

For more severe conditions and immersion, cleaning to Sa $\frac{1}{2}$  in accordance with ISO 8501-1 is mandatory. Blast clean until a roughness profile of 50–75  $\mu\text{m}$  is achieved.

Where this is impossible or impractical, abrasive blasting may be used for the maintenance of coating systems; therefore, it may be applied to surfaces prepared manually and/or mechanically for the maintenance of coating systems, St 2, in accordance with ISO 8501-1, or in accordance with SSCPC-SP 11. In the case of maintenance, surface preparation may also be carried out by *water jetting* to a minimum grade of Wa 2 FRM in accordance with ISO 8501-4.

### Galvanised surfaces:

Remove oils and greases with the cleaning thinner. The surface must be lightly textured with a fine abrasive blasting.

### Concrete:

The concrete must have cured for at least 28 days and have a minimum tensile strength of 1.5 N/mm $^2$ . The surface must be thoroughly dry, cohesive, porous, clean and free from dust, dirt, grout and grease. Where this is not the case, preliminary cleaning with a water jet (70 to 350 bar) to CSP1 preparation grade as per ICRI Guide No. 310.2R is required. Remove formwork release agents, various additives such as concrete hardeners, grout, efflorescence and other contaminants; surface preparation by high-pressure washing (above 350 bar) or abrasive blasting to CSP3 grade is recommended.

### Damaged coatings:

It is compatible with most types of paint provided they are properly applied, firmly adhered and cohesive; however, a preliminary test is recommended to confirm compatibility.

## APPLICATION

Stir the resin and curing agent separately (stir slowly), then mix the mixture thoroughly for 5 minutes using a mechanical mixer. Before use, the material temperature must not be less than 3°C above the dew point. Add the solvent once both components have been thoroughly mixed.

| Environmental conditions      |                         |
|-------------------------------|-------------------------|
| Relative humidity             | < 85%                   |
| Air temperature               | -10°C to 40°C           |
| Product temperature           | > 10°C                  |
| Minimum substrate temperature | 3°C above the dew point |
| Maximum substrate temperature | 100°C                   |

## APPLICATION EQUIPMENT

| Conventional spray gun | Recommended                              |
|------------------------|------------------------------------------|
| Nozzle orifice         | 0.055 – 0.070 inches<br>(1.39 – 1.77 mm) |
| Air pressure           | 3.5 – 5.3 kg/cm $^2$                     |
| Paint pressure         | 0.7 – 1.7 kg/cm $^2$                     |
| Volume dilution        | 0 – 15 %                                 |

| Airless spray gun | Recommended                              |
|-------------------|------------------------------------------|
| Nozzle orifice    | 0.015 – 0.019 inches<br>(0.38 – 0.48 mm) |



## KRYPTON CHEMICAL SL

12 Martí i Franquès Street - Les Tàpies Industrial Estate  
43890 - l'Hospitalet de l'Infant - Spain  
Tel: +34 977 822 245 - Fax: +34 977 823 977  
www.kryptonchemical.com – rayston@kryptonchemical.com

Last revised:

26/05/2026

Page:

1/2

# KRYPTON PROLINE MFE100



Multifunctional, surface-tolerant epoxy, immersion

|                  |                              |
|------------------|------------------------------|
| Working pressure | 150 – 200 kg/cm <sup>2</sup> |
| Volume dilution  | 0 – 10 %                     |

| Brush / Roller     | Recommended |
|--------------------|-------------|
| Dilution by volume | 0 – 15 %    |

**Solvent:** Rayston Thinner EP

**For cleaning:** Rayston Thinner EP

Adding solvent will increase drying time. If a solvent other than the recommended one is used, the manufacturer accepts no liability for any reduction in the quality of the paint.

## NOTES

Suitable for immersion in water only in the case of light colours. As is common with epoxy products, this product may accumulate dust and show colour variations due to exposure to sunlight. This variation may be more or less noticeable depending on the colour, duration and intensity of exposure to UV radiation. Dust accumulation does not affect the product's anti-corrosive performance. Similarly, if the product is immersed in water before it has dried for at least 30 minutes after application, some colour variations may be observed; these variations are more evident in dark colours, but performance is not affected. Whenever an aesthetic finish is required, recommended products with good colour retention and gloss should be used for outdoor applications.

## ADDITIONAL INFORMATION

| Volatile Organic Compounds (VOC)          |                                                           |
|-------------------------------------------|-----------------------------------------------------------|
| EU limit value for the product (cat. A/j) | 500 g/L                                                   |
| Maximum content                           | 210 g/L VOC. Total Volatile Organic Compounds (TVOC: 15%) |
| Form of supply in pigmentation            | <150 g/L (TVOC: < 10 %)                                   |
| Form of supply in aluminium               | <270 g/L                                                  |
| VOC Resin                                 | 117 g/L (TVOC: 7%)                                        |
| VOC Curing agent                          | 240 g/L (TVOC: 25 %)                                      |
| VOC Thinner                               | 839 g/L (TVOC: 100%)                                      |

## PACKAGING AND STORAGE

**Packaging:**

Resin: 15 L.

Curing agent: 5 L.

**Storage:**

The product must be stored in its original sealed container at temperatures between 5 and 40°C, in a dry, well-ventilated place, away from sources of heat and fire.

Resin: 2 years.

Curing agent: 1 year.

## SAFETY

Avoid contact with skin. Protect eyes and skin from contact; use suitable protective equipment. Use in a well-ventilated area. Do not inhale spray. In case of contact with skin, wash the affected area immediately with detergent, soap and water. In case of contact with eyes, rinse immediately with water and seek medical attention immediately.

For further information, consult the product safety data sheets.

## ADDITIONAL INFORMATION

The information contained in this technical data sheet, as well as our advice—whether written, provided verbally or through trials—is given in good faith based on our experience and the results obtained from trials carried out by independent laboratories; however, it does not serve as a guarantee for the user, who should treat it as a guide only and for strictly informational purposes.

We recommend studying this information in depth before proceeding with the use and application of any of these products; however, it is particularly advisable to carry out on-site tests to determine the suitability of a treatment at the location, for the intended purpose and under the specific conditions prevailing in each case.

Our recommendations do not exempt the applicator from the obligation to have a thorough understanding of the correct method of application of these systems before proceeding with their use, nor from carrying out any necessary preliminary tests if there is any doubt as to their suitability for any construction work, installation or repair, taking into account the specific circumstances in which the product is to be used.

The application, use and processing of our products are beyond our control and are therefore the sole responsibility of the installer. Consequently, the applicator shall be solely and exclusively liable for any damages arising from total or partial failure to comply with the user and installation manual and, in general, from the inappropriate use or application of these products.

***This technical data sheet supersedes all previous versions.***



## KRYPTON CHEMICAL SL

12 Martí i Franquès Street - Les Tàpies Industrial Estate  
43890 - l'Hospitalet de l'Infant - Spain

Tel: +34 977 822 245 - Fax: +34 977 823 977

www.kryptonchemical.com – rayston@kryptonchemical.com

Last revised:

26/05/2026

Page:

2/2