

Krypton Proline ZN PRIMER



Anti-corrosive polyurethane primer with zinc and micaceous iron oxide

DESCRIPTION

Single-component, moisture-curing, fast-drying, anti-corrosive polyurethane primer with zinc and micaceous iron oxide (MIO).

CHARACTERISTICS

Application:

- At sub-zero temperatures down to -18°C.
 - At high relative humidity up to 99%.
 - No dew point restrictions.
 - No restrictions on maximum recoating time. (*)
 - Minimum surface preparation to St2 grade (ISO 8501-1).
- (*) Please enquire.

Provides:

- Cathodic (galvanic) protection and long-term barrier effect on metal surfaces.
- Long-lasting protection as a primer for some Krypton systems. Consult.

RECOMMENDED USE

Steel surfaces:

- As part of a system for structures in medium, high, very high and extreme corrosive environments (C3, C4, C5 and CX-ISO-12944-2/2018).
- As part of a system for structures immersed in fresh, salt or brackish water, compatible with cathodic protection (Im1; Im2 and Im4 - ISO-12944-2 / 2018).

COMPATIBLE COATINGS

Depending on operating conditions, the product can be used with different types of paints.

- Krypton moisture-cured single-component polyurethanes (PU 1K).
- Krypton two-component polyurethanes (PU 2K).

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

TECHNICAL DATA

Appearance	
Colour	Grey
Appearance	Matt
Properties	
Volume solids	67 ± 2%
Density 8at +20°C)	2.27 ± 0.05 g/cm³
VOC value	< 250 g/l
Dry heat resistance (ASTM D2485)	
• Prolonged exposure	145°C
• Short exposure	175°C
Under insulation	110°C

SURFACE PREPARATION

Surface type	Minimum	Recommended
Surface profile	Ry5 (30–75 µm) (ISO 8503-1)	Ry5 (30–75 µm) (ISO 8503-1)
Steel surfaces	St 2 (ISO 8501-1)	Sa 2½ (ISO 8501-1)

AMBIENT CONDITIONS

Environmental conditions	
Air temperature	from -18°C to +55°C
Surface temperature	from -18°C to +55°C
Relative humidity*	30 - 99%
Dew point	No limitation. The surface must be dry to the touch

Note:

- Do not apply in rain or snow, or if the applied material does not have sufficient time to dry to the touch before rain or snow falls.

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

THICKNESS AND THEORETICAL SPREADING RATE

	Minimum	Average	Maximum
Dry film thickness	80 µm	100 µm	125 µm
Wet film thickness	120 µm	150 µm	187 µm
Spreading Rate	8.4 m²/l	6.7 m²/l	5.4 m²/l

Note:

- The practical coverage depends on the application conditions, type of structure to be painted, surface roughness and application method.

DRYING TIME

For DFT of 120 µm	-5 °C	0 °C	5 °C	10 °C	25 °C	40 °C
Dry to touch	1 hour 20 min	1h	45 min	40 min	30 min	20 min
Recoat with itself or 1 pack PUR, min / dried to handle	13h	9h	7h 30min	5 hours	3 hours	1 hour 30 min
Cured for service	-	-	-	10d	7d	5d

Note:

- As the relative humidity of the air decreases, the curing time of the coating increases.
- Drying and curing times determined at controlled temperature and relative humidity (RH) of 60-80%.
- Maximum recoating time please consult.
- The maximum overcoating interval recommended with polyurea is 24-48 hours for other situations please consult with krypton Technical Department.

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

APPLICATION DATA

Stirring:

It is a single pack of ready to use material. Prior to use, it must be thoroughly stirred with a low-speed mixer, avoiding air entrapment. Constant stirring is not required. Before opening and stirring the temperature of material must be at least 3°C above the dew point.



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Thinning:

The addition of thinner is usually not necessary. If necessary, ProLine Thinner / Rayston Thinner can be added up to 10 % to the volume.

Note:

- In the case of using a thinner other than those recommended, the manufacturer is not responsible for any possible reduction in the quality of the coating.

Cleaning:

After work all equipment shall be cleaned with the thinner ProLine Thinner / Rayston Thinner.

For further details, please contact the Krypton Technical Department.

APPLICATION METHODS

Airless, brush and roller application.

Spray application: Airless spraying is the primary application method. For other spray methods, viscosity correction may be required.

Brush: brush application.

Roller: roller application.

PACKAGING

Volume (litres)	Container size (litres)
10	10

STORAGE & SELF LIFE

The product must be stored in original sealed containers. The storage conditions are to keep the containers in a dry, well ventilated space away from source of heat and/or ignition.

Storage temperature	5°C to 30°C
Shelf life	6 months

Note:

- After lasting storage primer shall be stirred thoroughly until its precipitation is spread over the suspension homogeneously. Precipitation in primer does not change its properties or worsen its quality. After the expiration date has passed, it is necessary to check the quality of the paint material.

SAFETY

Use with adequate ventilation. Do not inhale aerosol. Avoid contact skin. After possible contact with skin, immediately wash the affected area with soap and water. In case of contact with eyes, rinse immediately with plenty of water and seek medical attention immediately.

For detailed information on the health risks, safety and precautions for use of this product, consult the product's Safety Data Sheet.

ADDITIONAL INFORMATION

The information contained in this TECHNICAL DATA SHEET, as well as our advice, whether written, verbal or provided through testing, is given in good faith based on our experience and the results obtained through testing carried out by independent laboratories, and does not serve as a guarantee for the applicator, who should take it as a guide and for information purposes only.

We recommend that you study this information in depth before using and applying any of these products, although it is particularly advisable to carry out tests on site to determine the suitability of a treatment in that location, for the purpose and under the specific conditions of each case.

Our recommendations do not exempt the applicator from the obligation to have in-depth knowledge of the correct method of application of these systems before proceeding to use them, as well as to carry out any preliminary tests that may be appropriate if there is any doubt as to their suitability for any 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 damage or loss resulting 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.



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