Krypton Proline AC MIO

Single-component polyurethane with micaceous iron oxide (MIO)

DESCRIPTION

Single-component, moisture-cured polyurethane intermediate primer with micaceous iron oxide (MIO).

CHARACTERISTICS

Application:

- At temperatures below freezing down to -18°C.
- At high relative humidity up to 99%.
- No dew point restrictions.
- No restrictions on maximum recoat time.
- Directly on ferrous and non-ferrous metal surfaces.

Provides:

- High UV resistance and colour stability.
- Resistance to weather conditions and abrasion.
- Anti-corrosive properties and barrier effect.
- Long-lasting protection in some systems with other compatible Krypton paints. Please enquire.

RECOMMENDED USE

Steel:

- 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).

Concrete:

- As a high-thickness intermediate layer.

COMPATIBILITY

Depending on the 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	Beige; Grey
Appearance	Matt

Properties	
Solids by volume	64 ±2%
Density	1.71 ± 0.05 g/cm³
VOC, volatile organic content	< 260g/l
Dry heat resistance (ASTM D2485)	
• **Prolonged exposure**	145°C
• **Short exposure**	175ºC

SURFACE PREPARATION

Surface type	Minimum	Recommended
Surface profile	Ry5 (30–75 µm) (ISO 8503-1)	Ry5 (30–75 µm) (ISO 8503-1)
Primed and previously painted surfaces	P St3; PMa ISO 8501-2, ISO 12944-4	P Sa2; PMa ISO 8501-2, ISO 129444
Steel	Sa 2 (ISO 8501-1)	Sa 2½ (ISO 8501-1)
Non-ferrous metals and stainless steel	Cleaning with alkaline solution, rinsing with water. (SSPC-SP 1)	Slightly rough surface ISO 8501-2, ISO 12944-4
Galvanised surfaces	Cleaning with alkaline solution, rinsing with water. (SSPC-SP 1)	Slightly rough surface ISO 8501-2, ISO 12944-4
Concrete	SSPC-SP 13/ NACE No. 6	SSPC-SP 13/ NACE No. 6

Note:

- Previously painted surfaces: Paint compatibility must be determined by testing on a small area.
- Concrete: Requires application of a primer sealer, ProLine AC MIO Sealer.

For further details, please contact the Krypton Technical Department.

ENVIRONMENTAL 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	200 µm
Wet film thickness	125 µm	156 µm	313 µm
Spreading Rate	8 m²/l	6.4 m²/l	3.2 m²/l

Note:

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

KRYPTON CHEMICAL SL
C/ Martí i Franquès, 12 - Pol. Ind. les Tàpies
43890 - l'Hospitalet de l'Infant - Spain
Tel: +34 977 822 245 - Fax: +34 977 823 977
www.kryptonchemical.com – rayston@kryptonchemical.com

Krypton Proline AC MIO

Single-component polyurethane with micaceous iron oxide (MIO)

DRYING TIME

Dry thickness 100 µm	-10 °C	0 °C	5	10 °C	25 °C	40
Dry to the touch	1 hour 30 minutes	1h	51 min	42 min	30 min	21 min
Dry for repainting with PUR 1K, min/drying for handling	9h 30m	6h	5h	4h	2	1 hour
Cured for service	-	-	-	10d	7d	4d

Note:

- There is no maximum recoating time.
- Drying and curing time determined at controlled temperature and relative humidity of 60-80%.
- If the relative humidity decreases, the curing time increases.

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

APPLICATION DATA

Homogenisation:
This is a single-component product. Before use, it must be thoroughly homogenised with a low-speed mechanical mixer, avoiding air entrapment. Before opening the containers, ensure that the temperature of the material is at least 3°C above the dew point.

Dilution:
It is not normally necessary to add thinner. If necessary, ProLine Thinner / Rayston Thinner can be added up to 10% by volume.
Note:

- If the recommended thinners are not used, the manufacturer is not responsible for any reduction in product quality.

Cleaning:
All equipment must be cleaned with ProLine Thinner / Rayston Thinner immediately after finishing the job.

For further details, please contact the Krypton Technical Department.

APPLICATION METHODS

Airless, brush and roller application.

Spray application: The airless machine is the main 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 AND EXPIRY

The material must be stored in its original sealed container. The product must be stored in a dry, well-ventilated place, away from sources of heat and/or ignition.

Storage temperature	5ºC to 30ºC
Shelf life	6 months

SAFETY

Use with adequate ventilation. Do not inhale aerosol. Avoid contact with 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 "in situ" to determine the suitability of a treatment on site, 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.

KRYPTON CHEMICAL SL
C/ Martí i Franquès, 12 - Pol. Ind. les Tàpies
43890 - l'Hospitalet de l'Infant - Spain
Tel: +34 977 822 245 - Fax: +34 977 823 977
www.kryptonchemical.com – rayston@kryptonchemical.com