

Krypton ProLine AC MIO

Polyurethane coating with micaceous iron oxide (MIO)



TECHNICAL DATA SHEET

DESCRIPTION

One-component, moisture-cure polyurethane priming and intermediate coating with micaceous iron oxide (MIO).

FEATURE

Application:

- Subzero temperatures down to -18°C.
- High relative humidity up to 99%.
- No dew point restrictions.
- No restriction on the maximum recoating interval.
- Directly on the surfaces of ferrous and non-ferrous metals.

Provided:

- High resistance to UV and color stability.
- Resistance to weathering and abrasion.
- Improved anticorrosive and barrier properties.
- Long-term protection (more than 25 years) in case of use in systems with other compatible Rayston coatings.

RECOMMENDED TO USE

Steel surfaces:

- For structures in medium, high, very high and extreme atmospheric corrosivity categories (C3, C4, C5 and CX - ISO-12944-2 / 2018).
- For structures immersed in fresh, sea or brackish water compatible with cathodic protection as well (Im1; Im2 and Im4 - ISO-12944-2 / 2018).

Concrete surfaces:

- As high-build intermediate coating.

COMPATIBLE COATINGS

Depending on the operating conditions the material can be used with different types of coatings.

- Single pack, moisture cured polyurethane coatings of Krypton (1pack PUR).
- Two-component polyurethane coatings of Krypton (2pack PUR).

For details, please contact Krypton Technical Sales Support.

TECHNICAL DATA

Appearance	
Color	Beige; Grey
Appearance	Matt

Material properties

Volume solids	64±2 %
Density (at +20°C)	1.73 ± 0.05 g/cm³
VOC value	< 260g/l
Dry heat resistance (ASTM D2485)	
- Prolonged exposure	145 °C
- Short-term exposure	175 °C

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; P Ma ISO 8501-2, ISO 12944-4	P Sa2; P Ma ISO 8501-2, ISO 12944-4
Steel surfaces	Sa 2 (ISO 8501-1)	Sa 2½ (ISO 8501-1)
Surfaces of non-ferrous metals and stainless steel	Clean with alkaline solution, rinse with water. (SSPC-SP 1)	Light surface roughness ISO 8501-2, ISO 12944-4
Galvanized surfaces	Clean with alkaline solution, rinse with water. (SSPC-SP 1)	Light surface roughness ISO 8501-2, ISO 12944-4
Concrete Surfaces	SSPC-SP 13/ NACE No. 6	SSPC-SP 13/ NACE No. 6

Note:

- Previously painted surfaces: To determine the compatibility of the coatings, perform a control application on a small area.

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For details, please contact Krypton Technical Sales Support.

AMBIENT CONDITIONS

Ambient conditions	
Air temperature	from -18°C to +55°C
Surface temperature	from -18°C to +55°C
Relative humidity	30 - 99%
Dew Point	Not limited surface is dry to touch

Note:

- Do not apply coating during rain or snow, or if precipitation is expected before the applied coating becomes dry to touch.

- For details, please contact Krypton Technical Sales Support.



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THICKNESS & THEORETICAL SPREADING RATE

	Min.	Middle	Max.
Dry Film Thickness	80 µm	100 µm	200 µm
Wet Film Thickness	125 µm	156 µm	313 µm
Spreading Rate	8 m ² /l	6.4 m ² /l	3.2 m ² /l

Note: Practical coverage depends on the application, type of structure to be painted, roughness of the surface and application method.

DRYING TIME

For DFT of 100 µm	-10 °C	0 °C	5 °C	10 °C	25 °C	40 °C
Dry to touch	1 h 30m	1 h	51 min	42 min	30 min	21 min
Dry to recoat with 1pack PUR, min / Dried to handle	9 h 30m	6 h	5 h	4 h	2 h	1 h
Cure for service	-	-	-	10 d	7 d	4 d

Note:

- There is no maximum overcoating interval.
- Drying and curing time determined at controlled temperature and relative humidity (RH) 60 - 85%.
- As the relative humidity of the air decreases, the curing time of the coating increases.

For details, please contact Krypton Technical Sales Support.

APPLICATION DATA

Stirring:

It is a single pack 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 dew point.

Thinning:

The addition of thinner is usually not necessary. If necessary ProLinethinner/Raystonhinner can be added up to 10% to the volume.

Note: If other than recommended thinners are used the manufacturer is not responsible for deterioration of coating quality.

Cleaning:

After work all equipment shall be cleaned with the thinner ProLinethinner/Raystonthinner.

For details, please contact Krypton Technical Sales Support.

APPLICATION METHODS

Application airless, brush and roller.

Spray application:

Airless spray is the main method of application. For other spraying methods, viscosity correction may be required.

Brush: application by brush.

Roller: application by roller

PACKAGING

Volume (liters)	Size of containers (liters)
10	10

STORAGE & SHELF 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	from 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 with skin. After contact with skin, wash immediately with detergent, soap and water. In case of contact with eyes, rinse immediately with water and seek medical advice immediately.

For detailed information on the health and safety protection for use of this product, see Safety Data Sheet (SDS).



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IMPORTANT NOTE

The above-mentioned information is given according to our laboratory tests and practical application experience.

The manufacturer takes into consideration the fact that the material can be used out of control; the manufacturer cannot give guarantees except of the material quality.

The manufacturer has the right to improve the product and change the above-mentioned data without preliminary notification.

THE PRESENT TECHNICAL DATA SHEET REPLACES ALL PREVIOUS EDITIONS.



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