

# RAYSTON PU ZN PRIMER 1K



## TECHNICAL DATA SHEET

### DESCRIPTION

Single pack, moisture-cure, fast drying polyurethane anticorrosive primer filled with zinc and micaceous iron oxide (MIO).

### FEATURE

#### Application:

- At subzero temperatures down to -18°C.
- At high relative humidity up to 99%.
- With no dew point restrictions.
- With no restriction on the maximum recoating interval.
- To minimum surface preparation to grade St2 (ISO 8501-1).
- Primer of waterproofing membranes and flooring.

#### Provides:

- Cathodic (galvanic) and barrier long-term protection of steel surfaces.
- 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).

### COMPATIBLE COATINGS

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

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

For details, please contact Rayston Technical Sales Support.

### TECHNICAL DATA

#### Appearance

Color	Grey
Appearance	Matt

#### Material properties

Volume solids	67 ± 2 %
Density (at +20 °C)	2.27 ± 0.05 g/cm <sup>3</sup>
VOC value	<250 g/l
Dry heat resistance (ASTM D2485)	
- Prolonged exposure	145 °C
- Short-term 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

#### Ambient conditions

Air temperature	from -18 to +55 °C
Surface temperature	from -18 to +55 °C
Relative humidity*	30 – 99 %
Dew Point	Not limited. Surface to be 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 Rayston Technical Sales Support.

### THICKNESS & THEORETICAL SPREADING RATE

	Min.	Recommend	Max.
Dry Film Thickness	80 µm	100 µm	125 µm
Wet Film Thickness	120 µm	150 µm	187 µm
Spreading Rate	8.4 m <sup>2</sup> /l	6.7 m <sup>2</sup> /l	5.4 m <sup>2</sup> /l

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



## KRYPTON CHEMICAL

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### DRYING TIME

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

#### Note:

- As the relative humidity of the air decreases, the curing time of the coating increases.
- There is no maximum overcoating interval.
- Drying and curing time determined at controlled temperature and relative humidity (RH) 60 - 80%.

For details, please contact Rayston 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 the dew point.

#### Thinning:

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

**Note:** In the case of using 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 Raystonthinner

For details, please contact Rayston Technical Sales Support.

### APPLICATION METHODS

#### Application by 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 to 30 °C
Shelf Life	18 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).

### 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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