# **RAYSTON RAYFORCE FD**

# TECHNICAL DATA SHEET

# DESCRIPTION

Two-component, high solids epoxy primer and midcoat. Cure at low temperature.

## FEATURE

### Provide:

Cathodic protection and prevents corrosion under the paint film.
The possibility of applying polyurethane coatings without an intermediate layer.

## **RECOMMENDED TO USE**

## Steel surface:

• As a primer or intermediate coating in corrosivity categories C2-C4, C5 and CX (ISO-12944-2 / 2018). It is suitable for frameworks of industry building, bridges, conveyors and structural constructions of process indrustry.

### Aluminium surfaces:

• As a primer or protective coating in corrosivity categories C2-C4, C5 and CX (ISO- 12944-2 /2018).

## **COMPATIBLE COATINGS**

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

• Two-component epoxy coatings (2 pack EP) of Rayston.

• Two-component polyurethane coatings (2 pack PUR) of Rayston. For details please contact the Rayston Technical Sales Support.

## **TECHNICAL DATA**

Total mass of solids

VOC value

Appearance	
Color	Grey
Appearance	Semi matt coating
Material properties	
Volume solids	78% ± 2%

# SURFACE PREPARATION

Surface type	Minimum	Recommended
Surface profile	Ry5 (30–75μm) (ISO 8503-1)	Ry5 (30–75μm) (ISO 8503-1)
Primed and previously painted surfaces	P St3; P Ma ISO 8501-2, ISO 12944-4	P Sa2; PMa ISO 8501-2½, ISO 12944-4
Steel surfaces	St 3 (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

# **AMBIENT CONDITIONS**

Ambient conditions	
Ambient air temperature	from +5 to +50°C
Surface temperature	from +5 to +50°C
Relative humidity, below	85%
Dew point	at least 3°C lower than steel temperature

Note: During application, the temperature of the coating should be at least +10°C.

# THICKNESS & THEORETICAL SPREADING RATE

Standard Grade	Min.	Middle	Max.
Dry Film Thickness	80 µm	150 µm	250 µm
Wet Film Thickness	103 µm	195 µm	321 µm
Spreading Rate	9.7 m²/l	5.1 m²/l	3.1 m²/l

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

## DRYING TIME

1385 g/l

190 g/l

Dry Film Thickness 80 µ	5°C	10°C	23°C
Surface dry (Dust free)	3 h	2.5 h	1.5 h
Dried to touch	8 h	6 h	3 h
Min. recoating interval	7 h	5 h	2 h
Min. intervalo de repintado con PU	14 h	10 h	3 h
Full curing	14 d	10 d	7 d

**Note:** Drying times and polymerization depend from the relative humidity, temperature, ventilation conditions and the thickness of the film.



## KRYPTON CHEMICAL

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- The maximum overcoating time is 3 months without roughening provided the surface is free from dirt and grease. If the coating has been exposed to direct sunlight for some time, special attention must be paid for the removal of chalking with the suitable method before the painting work.

For details please contact the RaystonTechnical Sales Support.

# **APPLICATION DATA**

### Mixing ratio: 5:1

Product	Volume
Resin	5 parts by volume
Curing Agent	1 part by volume

Stir resin and curing agent separately (slow stirring) and then mix both components thoroughly with propeller stirrer. Before use the temperature of packaging and material should not be less than 3° C higher than the dew point. Add thinner only after both components have been thoroughly mixed and stir the mixture.

## Thinning:

If is necessary, the thinner Raystonthinner EP could be add up to 10% by volume.

**Note:** Adding a thinner will increase the drying time. In the case of using thinner other than recommended, the manufacturer not takes responsibility for any possible reduction in the quality of the coating!

#### **Cleaner:**

Raystonthinner EP

## Pot life (+23 °C):

Approx. 1 h after mixing (induction time approx. 15 min).

## **APPLICATION METHODS**

## Application by airless spray, by roller and by brush.

For other spraying methods, viscosity correction may be required.

#### Airless spray:

Airless spray with a nozzle tip of 0.013"-0.018" orifice. Spray angle depending on the object to be painted. Pressure ratio of the spray pump must be minimum 45:1.

In order to ensure the best possible performance, it is recommendeded that the paint is at room temperature before the application.

## PACKAGING

	Volume (liters)	Size of containers (liters)
Comp. A	15	20
Comp. B	3	5

# **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 ignition.

Storage temperature	from 5 to 30°C
Componente "A"	1 years
Componente "B"	2 years

**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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