

RAYSTON RAYFORCE 21 PRIMER

RAYSTON
products

TECHNICAL DATA SHEET

DESCRIPTION

Two-component polyamide cured fast drying epoxy primer.

FEATURE

Provide:

- Barrier and cathodic protection.
- Prevents corrosion under the paint film.
- Extended recoating interval.
- The possibility of applying polyurethane coatings without an intermediate layer.
- It meets with the Swedish standard SIS 18 52 05 for two-component paints.

RECOMMENDED TO USE

Steel surface:

- Environment classes C2-C4 and C5-I/C5-M on blast cleaned steel surfaces (ISO- 12944-2).

Aluminium and non-ferrous surfaces:

- As a primer or protective coating in corrosivity categories C2-C4, C5 and CX (ISO- 12944-2 /2018).
- As an adhesive layer for epoxy and polyurethane coating systems.

COMPATIBLE COATINGS

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

- Single pack acryl coating (1pack AY) of Rayston.
- Two-component epoxy coatings (2pack EP) of Rayston.
- Two-component polyurethane coatings (2pack PUR) of Rayston.

For details please contact the Rayston Technical Sales Support.

TECHNICAL DATA

Appearance

Color	Red, grey, beige, black and offwhite*
Appearance	Matt coating

Material properties

Volume solids (mixed)	53% ± 2%
Total mass of solids	980 g/l
VOC value	420 g/l

Note: *offwhite color contains zinc phosphate.

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 St2; P Ma ISO 8501-2, ISO 12944-4	P Sa2; P Ma ISO 8501-2½, 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

Note: Minimum surface preparation grade for immersed surfaces should be not less than Sa 2½ (ISO 8501-1).

AMBIENT CONDITIONS

Ambient conditions	
Ambient air temperature	from +10 to +50°C
Surface temperature	from +10 to +50°C
Relative humidity, below	85%
Dew Point	at least 3°C lower than steel temperature

THICKNESS & THEORETICAL SPREADING RATE

	Min.	Max.
Dry Film Thickness	50 µm	100 µm
Wet Film Thickness	95 µm	190 µm
Spreading Rate	10.5 m ² /l	5.3 m ² /l

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

DRYING TIME

Dry Film Thickness 70 µm	Standard Comp. B		S-Comp. B	
	10°C	23°C	10°C	23°C
Dry to touch	2 h	30 min	30 min	15 min
Dried to handle	10 h	4 h	4 h	1 h
Min. recoating interval (with epoxy)	10 h	3 h	6 h	2 h
Min. recoating interval (with polyurethane)	12 h	4 h	8 h	3 h



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Page 1 / 2

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Dry Film Thickness 70 µ	Standard Comp. B		S-Comp. B	
	10°C	23°C	10°C	23°C
Min. recoating interval for immersion	24 h	16 h	24 h	16 h
Full curing	12 d	7 d	12 d	7 d

Note: Drying times and polymerization depend from the relative humidity, temperature, ventilation conditions and the thickness of the film. If maximum recoat time is exceeded, it is necessary to make surface roughness with abrasive, rinse with clean water to remove dirt and allow drying.

For details please contact the Krypton Technical Sales Support.

APPLICATION DATA

Mixing ratio: 4:1

Product	Volume
Resin (Comp. A)	4 parts by volume
Curing Agent (Comp. B)	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 could be add thinner Raystonthinner EP no more than 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:

Standard Comp. B: approx. 7 h after mixing
S-Comp. B: approx. 3 h after mixing

APPLICATION METHODS

Spray application:

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

Brush and Roller:

Application by brush and by roller.

PACKAGING

	Volume (liters)	Size of containers (liters)
Comp. A	8 / 16	10 / 20
Comp. B	2 / 4	2 / 4

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"	2 years
Componente "B"	3 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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