

# RAYSTON RAYFORCE MASTIC



## TECHNICAL DATA SHEET

### DESCRIPTION

Two-component, surface-tolerant, high solids, pigmented with micaceous iron oxide, epoxy based primer/topcoat.

### FEATURE

#### Application:

- With minimum surface preparation grade St 2 according ISO 8501-1.
- And cures at low temperatures, down to -5°C.

#### Provide:

- Due to the content of special additives, the material is able to penetrate into the solid layers of rust and prevents its further spread.
- Has been tested for use as an interior coating for the storage tanks and vehicles employed in the transport of grain.

### RECOMMENDED TO USE

#### Steel surfaces as:

- A primer or top coat in environmental classes C2-C4, C5 and CX (ISO-12944-2/2018).
- A single coat on box girders and plate structures.
- Maintenance coating on deep seated rust and old painted surfaces.
- 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:

- For structures in medium, high, very high and extreme atmospheric corrosivity categories (C3, C4, C5 and CX - ISO-12944-2 / 2018) as well as structures immersed in fresh, sea or brackish water (Im1; Im2 - 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 (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	Grey, red, white and industrial paint colours with limitations
Appearance	Semi matt coating

#### Material properties

##### Standard Grade

Volume solids	80% ± 2%
Total mass of solids	1230 g/l
VOC value	180 g/l

##### Winter Grade

Volume solids	74± 2%
Total mass of solids	1190 g/l
VOC value	230 g/l

### SURFACE PREPARATION

Surface type	Minimum	Recommended
Surface profile	Ry5 (30–75 µm) (ISO 8503-1)	Ry5 (30–75 µm) (ISO 8503-1)
Primed surfaces	P St2; P Ma ISO 8501-2, ISO 12944-4	P Sa2; PMa ISO 8501-2½, ISO 12944-4
Previously painted surfaces	P St2; P Ma ISO 8501-2; ISO 12944-4; WJ2 (NACE No.5/SSPC-SP 12)	P Sa2; PMa ISO 8501-2; ISO 12944-4; WJ2 (NACE No.5/SSPC-SP 12)
Steel surfaces	Sa 2 (ISO 8501-1)	Sa 2½ (ISO 8501-1)
Concrete Surfaces	SSPC-SP 13/ NACE No. 6	SSPC-SP 13/ NACE No. 6

#### Note:

Exposed to immersion: Blast cleaning to min. Sa2½ (ISO 8501-1, ISO 8504-2).

### AMBIENT CONDITIONS

#### Ambient conditions

##### Standard Grade

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



## KRYPTON CHEMICAL

C/ Martí i Franquès 12 - Pol. Ind. Les Tàpies  
43890 - l'Hospitalet de l'Infant - España  
Telf: +34 977 822 245 - Fax: +34 977 823 977  
rayston@kryptonchemical.com - www.kryptonchemical.com

# RAYSTON RAYFORCE MASTIC

RAYSTON  
products



## TECHNICAL DATA SHEET

### Ambient conditions

Winter Grade	
Ambient air temperature	from -5 to +40°C
Surface temperature	from -5 to +40°C
Relative humidity, below	85%
Dew Point	at least 3°C lower than steel temperature

**Note:** In order to ensure the best possible performance of the product, it is recommended that the temperature of paint itself be from 10 to 25°C during the application.

### THICKNESS & THEORETICAL SPREADING RATE

Standard Grade	Min.	Medio	Max.
Dry Film Thickness	120 µm	200 µm	300 µm
Wet Film Thickness	150 µm	250 µm	375 µm
Spreading Rate	6.2 m <sup>2</sup> /l	4.0 m <sup>2</sup> /l	2.7 m <sup>2</sup> /l

Winter Grade	Min.	Medio	Max.
Dry Film Thickness	120 µm	200 µm	300 µm
Wet Film Thickness	160 µm	270 µm	405 µm
Spreading Rate	6.2 m <sup>2</sup> /l	3.7 m <sup>2</sup> /l	2.5 m <sup>2</sup> /l

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

### DRYING TIME

#### Standard Grade

Dry Film Thickness 200 µm	23°C
Dry to touch	3 h
Dried to handle	5 h
Min. recoating interval	7 h
Full curing	7 d

#### Winter Grade

Dry Film Thickness 200 µm	-5°C	0°C	5°C	10°C	23°C
Dry to touch	24 h	18 h	12 h	6 h	4 h
Dried to handle	48 h	26 h	18 h	12 h	5 h
Min. recoating interval (2pack EP)	48 h	26 h	18 h	12 h	-
Min. recoating interval (2pack PUR)	-	-	96 h	48 h	-
Full curing	21 d	14 d	7 d	3 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 Rayston Technical Sales Support.

### APPLICATION DATA

#### Mixing ratio: 1:1

Product	Volume
Resin	1 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 added from 5 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:

Standard Grade (+23°C)

Approx. 1 h after mixing.

#### Winter Grade

Approx. 1 h after mixing (+23 °C)

Approx. 3 h after mixing (+10 °C)



## KRYPTON CHEMICAL

C/ Martí i Franquès 12 - Pol. Ind. Les Tàpies  
43890 - l'Hospitalet de l'Infant - España  
Telf: +34 977 822 245 - Fax: +34 977 823 977  
rayston@kryptonchemical.com - www.kryptonchemical.com

# RAYSTON RAYFORCE MASTIC



## TECHNICAL DATA SHEET

### APPLICATION METHODS

Application by airless spray, by brush and by roller. For other spraying methods, viscosity correction may be required.

#### Airless spray:

Airless spray with nozzle tip of 0.017"-0.023" orifice. Spray angle depending on the object to be painted. In order to ensure the best possible performance of the product, it is recommended that the paint is at room temperature before the application.

### PACKAGING

	Volume (liters)	Size of containers (liters)
Comp. A	10	20
Comp. B	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 ignition.

Storage temperature:	from 5 to 30°C
Componente "A"	3 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.**



## KRYPTON CHEMICAL

C/ Martí i Franquès 12 - Pol. Ind. Les Tàpies  
43890 - l'Hospitalet de l'Infant - España  
Telf: +34 977 822 245 - Fax: +34 977 823 977  
rayston@kryptonchemical.com - www.kryptonchemical.com