

Marathon IQ

Product description

This is a two component polyamine cured epoxy coating. It is a high build, solvent free product. It is highly scratch resistant. Suitable for environments with very high corrosivity. Can be used as primer, mid coat, finish coat or as single coat system in atmospheric and immersed environments. Suitable for properly prepared carbon steel substrates.

Typical use

Marine:

Specially suited in areas where high scratch resistance is required. Specially designed for ice going vessels including ice breakers. May be used as anode shield around ICCP anodes.

Protective:

Suitable for structural steel and piping to be exposed to corrosive environments up to very high and immersed. Recommended for offshore environments, refineries, power plants, bridges, buildings, mining equipment and general structural steel. Compatible with cathodic protection systems.

Approvals and certificates

Recognised abrasion resistant coating ice coating from Lloyds Register
Type approval for ice trade by Russian Maritime Register of shipping

Additional certificates and approvals may be available on request.

Colours

red

Product data

| Property | Test/Standard | Description |
|-----------------------|-------------------------------|---------------|
| Solids by volume | ISO 3233 | 98 ± 2 % |
| Gloss level (GU 60 °) | ISO 2813 | gloss (70-85) |
| Flash point | ISO 3679 Method 1 | 55 °C |
| VOC-EU | IED (2010/75/EU) (calculated) | 42 g/l |

The provided data is typical for factory produced products, subject to slight variation depending on colour.

All data is valid for mixed paint.

Gloss description: According to Jotun Performance Coatings' definition.

Film thickness per coat

Typical recommended specification range

| | |
|----------------------------|-----------------------------|
| Dry film thickness | 250 - 700 μm |
| Wet film thickness | 250 - 700 μm |
| Theoretical spreading rate | 3,9 - 1,6 m ² /l |

For ice resistance, film thickness 500 µm applied as one coat is recommended.

Surface preparation

To secure lasting adhesion to the subsequent product all surfaces shall be clean, dry and free from any contamination.

Surface preparation summary table

| Substrate | Surface preparation | |
|-----------------|---|---|
| | Minimum | Recommended |
| Carbon steel | Sa 2½ (ISO 8501-1) | Sa 2½ (ISO 8501-1) |
| Coated surfaces | Clean, dry and undamaged compatible coating (ISO 12944-5 6.1) | Clean, dry and undamaged compatible coating (ISO 12944-5 6.1) |

Application

Application methods

The product can be applied by

- Spray: Two component heated airless spray. If permitted, thin 10 %, to use normal airless spray. If thinned the abrasion resistance may be reduced. No thinning accepted when used for ice resistance.
- Brush: Recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

Product mixing ratio (by volume)

| | |
|-------------------------------------|-----------|
| Marathon IQ Comp A | 2 part(s) |
| Marathon IQ / Marathon IQ GF Comp B | 1 part(s) |

Thinner/Cleaning solvent

- Thinner: Jotun Thinner No. 17
- Thinning will prolong the drying and curing times.
- Thinning max.: 10 %

Guiding data for airless spray

- Nozzle tip (inch/1000): 21-31
- Pressure at nozzle (minimum): 200 bar/2900 psi

Drying and Curing time

| Substrate temperature | 10 °C | 23 °C | 40 °C |
|--|-------|-------|-------|
| Surface (touch) dry | 6 h | 3 h | 2 h |
| Walk-on-dry | 20 h | 10 h | 4 h |
| Dry to over coat, minimum | 20 h | 10 h | 4 h |
| Dry to over coat, maximum, atmospheric | 5 d | 3 d | 2 d |
| Dried/cured for service | 14 d | 7 d | 3 d |
| Dried/cured for immersion | 4 d | 2 d | 1 d |

Drying and curing times are determined under controlled temperatures and relative humidity below 85 %, and at average of the DFT range for the product.

Surface (touch) dry: The state of drying when slight pressure with a finger does not leave an imprint or reveal tackiness.

Walk-on-dry: Minimum time before the coating can tolerate normal foot traffic without permanent marks, imprints or other physical damage.

Dry to over coat, minimum: The shortest time allowed before the next coat can be applied.

Dry to over coat, maximum, atmospheric: The longest time allowed before the next coat can be applied.

Dried/cured for service: Minimum time before the coating can be permanently exposed to the intended environment/medium.

Dried/cured for immersion: Minimum time before the coating can be permanently immersed in sea water.

Induction time and Pot life

| Paint temperature | 23 °C |
|-------------------|--------|
| Pot life | 30 min |

Heat resistance

| | Temperature | |
|---------------------|-------------|--------|
| | Continuous | Peak |
| Dry, atmospheric | 120 °C | 120 °C |
| Immersed, sea water | 50 °C | 60 °C |

Peak temperature duration max. 1 hour.

The temperatures listed relate to retention of protective properties. Aesthetic properties may suffer at these temperatures.

Note that the coating will be resistant to various immersion temperatures depending on the specific chemical and whether immersion is constant or intermittent. Heat resistance is influenced by the total coating system. If used as part of a system, ensure all coatings in the system have similar heat resistance.

Product compatibility

Depending on the actual exposure of the coating system, various primers and topcoats can be used in combination with this product. Some examples are shown below. Contact Jotun for specific system recommendation.

Subsequent coat: vinyl epoxy, epoxy, polyurethane

Packaging (typical)

| | Volume (litres) | Size of containers (litres) |
|-------------------------------------|----------------------------|--|
| Marathon IQ Comp A | 10 | 20 |
| Marathon IQ / Marathon IQ GF Comp B | 5 | 5 |

The volume stated is for factory made colours. Note that local variants in pack size and filled volumes can vary due to local regulations.

Storage

The product must be stored in accordance with national regulations. Keep the containers in a dry, cool, well ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

Shelf life at 23 °C

| | |
|-------------------------------------|-------------|
| Marathon IQ Comp A | 48 month(s) |
| Marathon IQ / Marathon IQ GF Comp B | 48 month(s) |

In some markets commercial shelf life can be dictated shorter by local legislation. The above is minimum shelf life, thereafter the paint quality is subject to re-inspection.

Caution

This product is for professional use only. The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to Jotun's technical documentation. Applicators and operators shall use appropriate personal protection equipment when using this product. This guideline is given based on the current knowledge of the product. Any suggested deviation to suit the site conditions shall be forwarded to the responsible Jotun representative for approval before commencing the work.

Health and safety

Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not inhale spray mist. Avoid skin contact. Spillage on the skin should immediately be removed with suitable cleanser, soap and water. Eyes should be well flushed with water and medical attention sought immediately.

Colour variation

When applicable, products primarily meant for use as primers or antifoulings may have slight colour variations from batch to batch. Such products may fade and chalk when exposed to sunlight and weathering.

Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.
