

Technical Data Marathon IQ



Product description

Marathon IQ is a practically solvent free, abrasion resistant, two-pack epoxy coating.

Recommended use

Steel subject to extreme mechanical exposure - such as underwater areas of ice going vessels including ice breakers.
Certificate: Ice Class: Recognised low friction surface coating (LR).

Film thickness and spreading rate

	Minimum	Maximum	Typical	For ice resistance
Film thickness, dry (μm)	250	700	300	500
Film thickness, wet (μm)	250	700	300	500
Theoretical spreading rate (m^2/l)	3,9	1,6	3,3	2,0

Physical properties

Colour	Red
Solids (vol %)*	98 $\pm$ 2
Flash point	55°C
VOC	30 gms/ltr UK-PG6/23(97). Appendix 3
Gloss	Glossy
Gloss retention	Fair
Water resistance	Excellent
Abrasion resistance	Excellent
Solvent resistance	Excellent
Chemical resistance	Excellent
Flexibility	Fair
Compatibility with cathodic protection	Excellent

*Measured according to ISO 3233:1998 (E)

Surface preparation

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504.

Bare steel

Cleanliness: Blast cleaning to min. Sa 2 ½ (ISO 8501 1:2007). Roughness: use suitable abrasives to achieve Grade Coarse G (85 - 130 µm, Ry5) (ISO 8503-2).

Other surfaces

The coating may be used on other substrates. Please contact your local Jotun office for more information.

Condition during application

The temperature of the substrate should be minimum 10°C and at least 3°C above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. Good ventilation is required in confined areas to ensure proper drying. The coating should not be exposed to oil, chemicals or mechanical stress until cured.

Application methods

Spray	Two-comp. heated airless spray. If permitted, thin 10%, to use normal airless spray (However, 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.

Application data

Mixing ratio (volume)	2 parts Comp. A (base) to be mixed thoroughly with 1 part Comp. B (curing agent)
Pot life (23°C)	30 minutes (Reduced at higher temperatures).
Thinner/Cleaner	Jotun Thinner No. 17, max 10%.
Guiding data airless spray	
Pressure at nozzle	20 MPa (200 kp/cm², 2800 psi.).
Nozzle tip	0.63-1.09 mm (0.025-0.045")
Spray angle	40-80°
Filter	Check to ensure that filters are clean.
Note	Thinning will prolong the drying and curing times.

Drying time

Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with:

- * Good ventilation (Outdoor exposure or free circulation of air)
- * Typical film thickness
- * One coat on top of inert substrate

Substrate temperature	10 °C	23 °C	40 °C
Surface dry	6 h	3 h	2 h
Through dry	20 h	10 h	4 h
Cured	14 d	7 d	3 d
Dry to recoat, minimum	20 h	10 h	4 h
Dry to recoat, maximum ¹	5 d	3 d	2 d

- 1 The paint has to be applied in one coat. If the paint film is too thin, roughening of the surface by blasting to Grade Coarse G is needed.
- 2 The surface should be dry and free from any contamination prior to application. If the maximum dry to recoat time is exceeded, please contact your local Jotun office for more information.

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

Typical paint system

For corrosion protection, on Sa 2½:

Marathon IQ **1-2 x 300 µm** **(Dry Film Thickness)**

For maximum ice resistance, on Sa 2½:

Marathon IQ **1 x 500 µm** **(Dry Film Thickness)**

If overcoated with antifouling, a tie-coat is recommended

Other systems may be specified, depending on area of use

Storage

The product must be stored in accordance with national regulations. Storage conditions are to keep the containers in a dry, cool, well ventilated space and away from source of heat and ignition. Containers must be kept tightly closed.

Handling

Handle with care. Stir well before use.

Packing size

10 litres Comp. A (base) in a 20 litre container and 5 litres Comp. B (curing agent) in a 5 litre container

Packing may vary from country to country according to local requirements.

Health and safety

Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not breathe or inhale 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.

For detailed information on the health and safety hazards and precautions for use of this product, we refer to the Material Safety Data Sheet.

DISCLAIMER

The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product can be used under conditions beyond our control, we can only guarantee the quality of the product itself. We also reserve the right to change the given data without notice. Minor product variations may be implemented in order to comply with local requirements.
If there is any inconsistency in the text the English (UK) version will prevail.

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