

Marathon XHB

Product description

This is a two component polyamine cured epoxy coating. It is a high solids, high build, glass flake reinforced product. The product provides high abrasion resistance. 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 and concrete substrates.

Typical use

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. Specially suited in areas where high mechanical strength is required. Compatible with cathodic protection systems.

Colours

selected range of colours

Product data

Property	Test/Standard	Description	
Solids by volume	ISO 3233	96 ± 2 %	
Gloss level (GU 60 °)	ISO 2813	gloss (70-85)	
Flash point	ISO 3679 Method 1	40 °C	
Region	Regulation	Test Standard	VOC Value
US	CARB(SCM)2020 / SCAQMD rule 1113	Calculated	177 g/l
Hong Kong	Air Pollution Control (VOC) Regulation	Calculated	177 g/l
EU	European Paint Directive 2004/42/CE	Calculated	177 g/l
EU IED	Industrial Emission Directive 2010/75/EU	Calculated	177 g/l
Korea	Korea Clean Air Conservation Act	KS M ISO 11890-1	174 g/l
China	GB 30981-2020 Limit of harmful substances of industrial protective coatings	GB/T 34682-2017	42 g/l

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

Gloss description: According to Jotun Performance Coatings' definition.

Film thickness per coat

Typical recommended specification range

Dry film thickness	400 - 1000 µm
Wet film thickness	420 - 1040 µm
Theoretical spreading rate	2.4 - 0.96 m ² /l

Surface preparation

Surface preparation summary table

Substrate	Surface preparation	
	Minimum	Recommended
Carbon steel	Sa 2½ (ISO 8501-1)	Sa 2½ (ISO 8501-1)
Concrete	Minimum 4 weeks curing. Moisture content maximum 5 %. Prepare the surface by means of enclosed blast shot or diamond grinding and other appropriate means to abrade the surrounding concrete and to remove laitance.	Minimum 4 weeks curing. Moisture content maximum 5 %. Prepare the surface by means of enclosed blast shot or diamond grinding and other appropriate means to abrade the surrounding concrete and to remove laitance.
Coated surfaces	Clean, dry and undamaged compatible coating	Clean, dry and undamaged compatible coating
Shop primed steel	Sa 2 (ISO 8501-1)	Sa 2 (ISO 8501-1)

Application

Application methods

The product can be applied by

Spray: Use airless spray.

Brush: Recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

For temperatures below 20 °C it is recommended to use two component heated plural spray unit or modified airless spray (with heating equipment) and heated hoses.

Product mixing ratio (by volume)

Marathon XHB Comp A	2 part(s)
Marathon XHB Comp B	1 part(s)

Thinner/Cleaning solvent

Thinner:	Jotun Thinner No. 17
Thinning max.:	10 %

Thinning will prolong the drying and curing times.
Thinning is not normally required. Consult the local representative for advice during application in extreme conditions. Do not thin more than allowed by local environmental legislation.

Guiding data for airless spray

Nozzle tip (inch/1000):	23-31
Pressure at nozzle (minimum):	200 bar/2900 psi

Drying and Curing time

Substrate temperature	10 °C	23 °C	40 °C
Surface (touch) dry	8 h	4 h	2 h
Walk-on-dry	20 h	10 h	4 h
Dry to over coat, minimum	20 h	10 h	4 h
Dried/cured for service	14 d	7 d	3 d

For maximum overcoating intervals, refer to the Application Guide (AG) for this product.

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 recommended shortest time 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.

Induction time and Pot life

Paint temperature 23 °C

Pot life 45 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.

Previous coat: inorganic zinc silicate shop primer
Subsequent coat: vinyl epoxy, epoxy, polyurethane, polysiloxane

Packaging (typical)

	Volume (litres)	Size of containers (litres)
Marathon XHB Comp A	10	20
Marathon XHB 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, shaded, 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 XHB Comp A	48 month(s)
Marathon XHB 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 and epoxy based products used as a finish coat may chalk when exposed to sunlight and weathering.

Colour and gloss retention on topcoats/finish coats may vary depending on type of colour, exposure environment such as temperature, UV intensity etc., application quality and generic type of paint. Contact your local Jotun office for further information.

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.