Marathon 1000 GF

Product description

This is a two component polyamine cured epoxy coating. It is a high build, solvent free, glass flake reinforced product. It has very good impact and abrasion resistance. Suitable for environments with very high corrosivity, such as areas in the splash or tidal zone. 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

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, such as splash or tidal zones.
Can be used as a non-slip deck system in combination with appropriate Anti-Skid aggregate and finish coat.
Compatible with cathodic protection systems.

Approvals and certificates

Pre-qualified in accordance with NORSOK M-501 in selected systems

Additional certificates and approvals may be available on request.

Colours

selected range of colours

Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	98 ± 2 %
Flash point	ISO 3679 Method 1	100 °C
Density	calculated	1.4 kg/l

Region	Regulation	Test Standard	VOC Value
US	CARB(SCM)2020 / SCAQMD rule 1113	Calculated	47 g/l
Hong Kong	Air Pollution Control (VOC) Regulation	Calculated	47 g/l
EU	European Paint Directive 2004/42/CE	Calculated	47 g/l
EU IED	Industrial Emission Directive 2010/75/EU	Calculated	47 g/l
Korea	Korea Clean Air Conservation Act	KS M ISO 11890-1	67 g/l
China	Mandatory national standard of China	GB 30981.2-2025	12 g/l

This Technical Data Sheet supersedes those previously issued.
The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) and the Application Guide (AG) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com

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

Film thickness per coat

Typical recommended specification range

Dry film thickness	500	-	1000	µm
Wet film thickness	510	-	1020	µm
Theoretical spreading rate	2	-	1	m²/l

When used on horizontal areas as part of a deck coating system the maximum DFT is 2000 µm.

Surface preparation

Surface preparation summary table

Substrate	Surface preparation	
	Minimum	Recommended
Carbon steel	St 2 (ISO 8501-1)	Sa 2½ (ISO 8501-1)
Shop primed steel	Clean, dry and undamaged approved shop primer	Sweep blasted or alternatively blasted to Sa 2 (ISO 8501-1) of at least 70 % of the surface.
Coated surfaces	Clean, dry and undamaged compatible coating	Clean, dry and undamaged compatible coating
Stainless steel	-	Abrasive blast cleaning to achieve a surface profile using non-metallic abrasive media which is suitable to achieve a sharp and angular surface profile.

Application

Application methods

The product can be applied by

Spray:	Use airless spray, or two component heated airless spray equipment.
Brush:	Recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

This Technical Data Sheet supersedes those previously issued.
The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) and the Application Guide (AG) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com

Product mixing ratio (by volume)

Marathon 1000 GF Comp A	3 part(s)
Marathon 1000 GF Comp B	1 part(s)

Thinner/Cleaning solvent

Thinner: Jotun Thinner No. 17

Thinning max.: 5 %

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.

Note: Korean VOC regulation "Korea Clean Air Conservation Act" and its corresponding thinning limit will prevail over recommended thinning volumes.

Guiding data for airless spray

Nozzle tip (inch/1000): 21-31

Pressure at nozzle (minimum): 210 bar/3000 psi

Heavy duty nozzles to be used.

Pump capacity: 2.2 l/min - 4.8 l/min

Drying and Curing time

Substrate temperature	5 °C	10 °C	15 °C	23 °C	40 °C
Surface (touch) dry	21 h	14 h	10 h	7 h	3 h
Walk-on-dry	32 h	19 h	16 h	9 h	4 h
Dry to over coat, minimum	32 h	19 h	16 h	9 h	4 h
Dried/cured for immersion	14 d	10 d	10 d	7 d	3 d
Dried/cured for service	14 d	10 d	10 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 immersion: Minimum time before the coating can be permanently immersed in sea water.

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

This Technical Data Sheet supersedes those previously issued.
The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) and the Application Guide (AG) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com

Induction time and Pot life

Paint temperature	23 °C
Pot life	45 min

Reduced at higher temperatures, and with increased mixing volumes.

Heat resistance

	Temperature	
	Continuous	Peak
Dry, atmospheric	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:	epoxy, zinc rich epoxy, inorganic zinc silicate
Subsequent coat:	polyurethane, polysiloxane, epoxy, vinyl epoxy

Packaging (typical)

	Volume (litres)	Size of containers (litres)
Marathon 1000 GF Comp A	13.5	20
Marathon 1000 GF Comp B	4.5	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.

This Technical Data Sheet supersedes those previously issued.

The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) and the Application Guide (AG) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com

Shelf life at 23 °C

Marathon 1000 GF Comp A	12 month(s)
Marathon 1000 GF Comp B	12 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.

Environmental Documentation

This product can contribute to Green Building Standard credits. Please refer to Jotun.com for more information or contact your local Jotun representative.

Environmental Product Declaration (EPD) is available at www.epd-norge.no

Caution

This product is for professional use only. The applicator and operator 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 should 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 in 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 sought medical attention 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 data given 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.

This Technical Data Sheet supersedes those previously issued.
The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) and the Application Guide (AG) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com