Technical Data Sheet

Jotamastic 90 GF

Product description

This is a two component polyamine cured epoxy mastic coating. It is a surface tolerant, abrasion resistant, high solids, high build product. It is reinforced with glass flakes for improved abrasion and scratch resistance. Specially designed for areas where optimum surface preparation is not possible or required. Provides long lasting protection in environments with 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, galvanised steel, stainless steel, aluminium, concrete and a range of aged coating surfaces. It can be applied at sub zero surface temperatures.

Typical use

General:
Primarily designed for maintenance and repair. Specially suitable for surfaces exposed to considerable wear and tear such as high traffic areas.

Other variants available

Jotamastic 90

Refer to separate TDS for each variant.

Colours

grey, red
selected range of colours tinted over Multicolor Industry tinting system (MCI)

Product data

Property	Test/Standard	Description
STANDARD GRADE		
Solids by volume	ISO 3233	80 ± 2 %
Gloss level (GU 60 °)	ISO 2813	semi gloss (35-70)
Flash point	ISO 3679 Method 1	35 °C
Density	calculated	1.4 kg/l

Region	Regulation	Test Standard	VOC Value
US	CARB(SCM)2020 / SCAQMD rule 1113	Calculated	204 g/l
Hong Kong	Air Pollution Control (VOC) Regulation	Calculated	225 g/l
EU	European Paint Directive 2004/42/CE	Calculated	225 g/l
EU IED	Industrial Emission Directive 2010/75/EU	Calculated	225 g/l
Korea	Korea Clean Air Conservation Act	KS M ISO 11890-1	230 g/l
China	GB 30981-2020 Limit of harmful substances of industrial protective coatings	GB/T 23985-2009 8.3	224 g/l

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WINTER GRADE

Solids by volume	ISO 3233	80 ± 2 %
Flash point	ISO 3679 Method 1	36 °C
Density	calculated	1.4 kg/l

Region	Regulation	Test Standard	VOC Value
US	CARB(SCM)2020 / SCAQMD rule 1113	Calculated	204 g/l
Hong Kong	Air Pollution Control (VOC) Regulation	Calculated	204 g/l
EU	European Paint Directive 2004/42/CE	Calculated	204 g/l
EU IED	Industrial Emission Directive 2010/75/EU	Calculated	204 g/l
Korea	Korea Clean Air Conservation Act	KS M ISO 11890-1	245 g/l
China	GB 30981-2020 Limit of harmful substances of industrial protective coatings	GB/T 23985-2009 8.3	200 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

STANDARD GRADE

Dry film thickness	200	-	300	µm
Wet film thickness	250	-	375	µm
Theoretical spreading rate	4	-	2.7	m²/l

WINTER GRADE

Dry film thickness	200	-	300	µm
Wet film thickness	250	-	375	µm
Theoretical spreading rate	4	-	2.7	m²/l

Surface preparation

Surface preparation summary table

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Substrate	Surface preparation	
	Minimum	Recommended
Carbon steel	St 2 (ISO 8501-1)	Sa 2 (ISO 8501-1)
Stainless steel	The surface shall be hand or machine abraded with non-metallic abrasives or bonded fibre machine or hand abrasive pads to impart a scratch pattern to the surface.	Abrasive blast cleaning to achieve a surface profile using non-metallic abrasive media which is suitable to achieve a sharp and angular surface profile.
Aluminium	The surface shall be hand or machine abraded with non-metallic abrasives or bonded fibre machine or hand abrasive pads to impart a scratch pattern to the surface.	Abrasive blast cleaning to achieve a surface profile using non-metallic abrasive media which is suitable to achieve a sharp and angular surface profile.
Galvanised steel	The surface shall be clean, dry and appear with a rough and dull profile.	Sweep blast-cleaning using non-metallic abrasive leaving a clean, rough and even pattern.
Shop primed steel	Clean, dry and undamaged shop primer (ISO 12944-4 5.4)	Sa 2 (ISO 8501-1)
Coated surfaces	Clean, dry and undamaged compatible coating	Clean, dry and undamaged compatible coating
Concrete	Low pressure water washing to a rough, clean, dry and laitance free surface.	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.

Optimum performance, including adhesion, corrosion protection, heat resistance and chemical resistance is achieved with recommended surface preparation.

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.

Product mixing ratio (by volume)

STANDARD GRADE

Jotamastic 90 GF Comp A	3.5 part(s)
Jotamastic 90 Standard Comp B	1 part(s)

WINTER GRADE

Jotamastic 90 GF Comp A	3.5 part(s)
Jotamastic 90 Wintergrade Comp B	1 part(s)

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Thinner/Cleaning solvent

Thinner: Jotun Thinner No. 17

Guiding data for airless spray

Nozzle tip (inch/1000): 21-27

Pressure at nozzle (minimum): 200 bar/2900 psi

Drying and Curing time

Substrate temperature	-5 °C	0 °C	5 °C	10 °C	23 °C	40 °C
STANDARD GRADE						
Surface (touch) dry			20 h	12 h	4 h	1.5 h
Walk-on-dry			40 h	20 h	6 h	3 h
Dry to over coat, minimum			40 h	20 h	6 h	3 h
Dried/cured for service			28 d	14 d	7 d	2 d
WINTER GRADE						
Surface (touch) dry	24 h	18 h	12 h	8 h	3.5 h	
Walk-on-dry	48 h	30 h	20 h	12 h	4 h	
Dry to over coat, minimum	48 h	30 h	20 h	12 h	4 h	
Dried/cured for service		21 d	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
STANDARD GRADE	
Pot life	2 h
WINTER GRADE	
Pot life	45 min

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Heat resistance

	Temperature	
	Continuous	**Peak**
Dry, atmospheric	100 °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:	epoxy shop primer, inorganic zinc silicate shop primer, zinc epoxy, epoxy, epoxy mastic, inorganic zinc silicate
Subsequent coat:	polyurethane, polysiloxane, epoxy, acrylic, vinyl epoxy

Packaging (typical)

	Volume (litres)	**Size of containers (litres)**
STANDARD GRADE		
Jotamastic 90 GF Comp A	3.5 / 15.6	5 / 20
Jotamastic 90 Standard Comp B	1 / 4.4	1 / 5
WINTER GRADE		
Jotamastic 90 GF Comp A	3.5 / 15.6	5 / 20
Jotamastic 90 Wintergrade Comp B	1 / 4.4	1 / 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

Jotamastic 90 GF Comp A	48 month(s)
Jotamastic 90 Standard Comp B	24 month(s)
Jotamastic 90 Wintergrade Comp B	24 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.

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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.

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