

## Jotamastic 90

### Product description

This is a two component polyamine cured epoxy mastic coating. It is a surface tolerant, abrasion resistance, high solids, high build product. This product is tintable in a wide range of colours in Jotun's Multicolor Industry (MCI) system. Specially designed for areas where optimum surface preparation is not possible or desired. 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.

**Marine:**  
Outside hulls, exterior and interior areas.

**Protective:**  
Recommended for offshore environments, including splash zones, refineries, power plants, bridges, buildings, mining equipment and general structural steel.

### Approvals and certificates

Low flame spread certificate according to IMO FTPC Part 5  
Grain, Newcastle Occupational Health  
Approved for PSPC for Crude Oil Tanks according to IMO Res. MSC 288(87)  
NORSOK System 1, Rev.5

Additional certificates and approvals may be available on request.

### Other variants available

Jotamastic 90 GF  
Refer to separate TDS for each variant.

### Colours

aluminium, aluminium red toned, black, white and according to Multicolor Industry tinting system (MCI)

## Product data

Property	Test/Standard	Description
<b>STANDARD GRADE</b>		
Solids by volume	ISO 3233	80 ± 2 %
Gloss level (60 °)	ISO 2813	semi gloss (35-70)
Flash point	ISO 3679 Method 1	35 °C
Specific gravity	calculated	1,43 kg/l
VOC-USA / VOC Hong Kong	EPA Method 24	270 g/l
VOC-Solvent Emission Directive	SED (1999/13/EC)	163 g/kg

### WINTER GRADE

Solids by volume	ISO 3233	80 ± 2 %
Flash point	ISO 3679 Method 1	36 °C
Specific gravity	calculated	1.43 kg/l
VOC-USA / VOC Hong Kong	EPA Method 24	220 g/l
VOC-Solvent Emission Directive	SED (1999/13/EC)	149 g/kg

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

Gloss level: According to Jotun Performance Coatings' definition.

Small colour variations may occur when changing between the two curing agents. If exposed to weathering without topcoat, the Wintergrade (WG) version will yellow at a faster rate than the same colour in Standard grade.

## Recommended film thickness per coat

Film thickness and spreading rate	Dry film thickness	Wet film thickness	Theoretical spreading rate (m <sup>2</sup> /l)
	(µm)	(µm)	
Minimum	100	125	8
Maximum	300	375	2,7
Typical	125	155	6,4

## 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	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 and to remove all polish from the surface.	Abrasive blast cleaning to achieve a surface profile using approved 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 and to remove all polish from the surface.	Abrasive blast cleaning to achieve a surface profile using approved 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.	Light brush blasting using non-metallic abrasive leaving a clean, rough and even pattern.
Shop primed steel	Clean, dry and undamaged shop primer (ISO 12944-4 6.1)	Sa 2 (ISO 8501-1)
Coated surfaces	Clean, dry and undamaged compatible coating (ISO 12944-4 6.1)	Clean, dry and undamaged compatible coating (ISO 12944-4 6.1)

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.
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## 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.
Roller:	May be used for small areas. Not recommended for first primer coat. Care must be taken to achieve the specified dry film thickness.

### Product mixing ratio (by volume)

Independent on substrate temperature the minimum temperature of the mixed base and curing agent is 10 °C. Lower temperature may require additional thinner to reach correct application viscosity. Additional thinner gives lower sag resistance and slower curing. If addition of thinner is required, this shall be done after mixing of the two components.

#### STANDARD GRADE

Jotamastic 90 Comp A	3,5 part(s)
Jotamastic 90 Standard Comp B	1 part(s)

#### WINTER GRADE

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

### Thinner/Cleaning solvent

Thinner: Jotun Thinner No. 17

### Guiding data for airless spray

Nozzle tip (inch/1000):	19-25
Pressure at nozzle (minimum):	150 bar/2100 psi

## Drying and Curing time

Substrate temperature	-5 °C	0 °C	5 °C	10 °C	23 °C	40 °C
<b>STANDARD GRADE</b>						
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			30 h	10 h	3 h	1.5 h
Dried/cured for service			28 d	14 d	7 d	2 d
<b>WINTER GRADE</b>						
Surface (touch) dry	24 h	18 h	12 h	8 h	3.5 h	
Walk-on-dry	72 h	30 h	20 h	12 h	4 h	
Dry to over coat, minimum	54 h	20 h	10 h	6 h	2 h	
Dried/cured for service	21 d	14 d	10 d	5 d	3 d	

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

Special conditions for USA.

In USA, below 15 °C only Wintergrade Comp. B is applicable. Reason is that Standard Comp. B has been modified due to local legislation.

Surface (touch) dry: The state of drying when slight pressure with a finger does not leave an imprint or reveal tackiness. Dry sand sprinkled on the surface can be brushed off without sticking to or causing damage to the surface.

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

Dried to over coat, minimum: The shortest 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.

## Induction time and Pot life

Paint temperature	23 °C
<b>STANDARD GRADE</b>	
Pot life	2 h
<b>WINTER GRADE</b>	
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.

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## 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

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## Packaging (typical)

	<b>Volume (litres)</b>	<b>Size of containers (litres)</b>
Jotamastic 90 Comp A	3.55/15.6	5/20
Jotamastic 90 Standard Comp B	1/4.4	1/5
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.

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## 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

Jotamastic 90 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 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.

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## 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.

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## Colour variation

Products primarily meant for use as primers and antifoulings may have slight color variations from batch to batch. Such products may fade and chalk when exposed to sunlight and weathering.

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## 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.

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