

Technical Data Sheet

Jotamastic 87 (1:1) Aluminium

Product description

This is a two component polyamine cured epoxy mastic coating. It is surface tolerant, high solids, high build product. 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 a primer, mid coat, finish coat or as single coat system in atmospheric and immersed environments. Suitable for properly prepared carbon steel and 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, including splash zones, refineries, power plants, bridges, buildings, mining equipment and general structural steel.

Approvals and certificates

Approved for PSPC for Water Ballast Tanks according to IMO Res. MSC 215(82)

Other variants available

Jotamastic 87

Jotamastic 87 GF

Refer to separate TDS for each variant.

Colours

Aluminium, RT Aluminium

Product data

STANDARD GRADE

Property	Test / Standard	Description
Solids by volume	ISO 3233	82 ± 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	216 g/l
VOC-Solvent Emission Directive	SED (1999/13/EC)	149 g/kg

WINTER GRADE

Property	Test / Standard	Description
Solids by volume	ISO 3233	74 ± 2 %
Flash point	ISO 3679 Method 1	31 °C
VOC-USA / VOC Hong Kong	EPA Method 24	250 g/l
VOC-Solvent Emission Directive	SED (1999/13/EC)	199 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.

Recommended film thickness per coat

STANDARD GRADE

Film thickness and spreading rate	Dry film thickness (µm)	Wet film thickness (µm)	Theoretical spreading rate (m ² /l)
Minimum	150	180	5,5
Maximum	300	365	2,7
Typical	200	245	4,1

WINTER GRADE

Film thickness and spreading rate	Dry film thickness (µm)	Wet film thickness (µm)	Theoretical spreading rate (m ² /l)
Minimum	150	200	4,9
Maximum	250	340	3
Typical	200	270	3,7

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)
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)	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.

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 15 °C. Lower temperature may require additional thinner to reach correct application viscosity. Additional thinner gives lower sag resistance and slower curing. If additional thinner is required, this shall be done after mixing of the two components.

STANDARD GRADE

Jotamastic 87 (1:1) AL Comp A 1 part(s)
Jotamastic 87 (1:1) AL Standard Comp B 1 part(s)

WINTER GRADE

Jotamastic 87 (1:1) AL Comp A 1 part(s)
Jotamastic 87 (1:1) AL 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

STANDARD GRADE

Substrate temperature	-5 °C	0 °C	5 °C	10 °C	23 °C	40 °C
Surface (touch) dry				8 h	4 h	2 h
Walk-on-dry				24 h	10 h	4 h
Dried to over coat, min				24 h	10 h	4 h
Dried / cured for service				14 d	7 d	2 d

WINTER GRADE

Substrate temperature	-5 °C	0 °C	5 °C	10 °C	23 °C	40 °C
Surface (touch) dry	24 h	18 h	12 h	6 h	2,5 h	
Walk-on-dry	80 h	44 h	26 h	16 h	6 h	
Dried to over coat, min	80 h	44 h	26 h	16 h	6 h	
Dried / cured for service	21 d	14 d	7 d	3 d	2 d	

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

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

STANDARD GRADE

Paint temperature	23 °C
Induction time	10 min
Pot life	1,5 h

WINTER GRADE

Paint temperature	23 °C
Pot life	1 h

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 a part of a system, ensure all coatings in the systems 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, epoxy, acrylic, vinyl epoxy

Packaging (typical)

	Volume (litres)	Size of containers (litres)
Jotamastic 87 (1:1) AL Comp. A	10	20
Jotamastic 87 (1:1) AL Standard Comp. B	10	10
Jotamastic 87 (1:1) AL Wintergrade Comp. B	10	10

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, 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 87 (1:1) AL Comp. A	48 month(s)
Jotamastic 87 (1:1) AL Standard Comp. B	48 month(s)
Jotamastic 87 (1:1) AL Wintergrade Comp. B	36 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. The 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 specific guidance on the general suitability of this product for their need and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.

Technical Data Sheet 5/21

Sales in Finland

NOR-MAALI Oy

www.nor-maali.fi

Vanhatie 20 15240 Lahti

forename.lastname@nor-maali.fi

tel. +358 3 874 650

myynti@nor-maali.fi