## **Technical Data Sheet**



# **Jotamastic 87 Aluminium**

## **Product description**

This is a two component polyamine cured epoxy mastic coating. It is a surface tolerant, high solids, high build product. It is aluminum pigmented for improved barrier effect. 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 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 water ballast tanks.

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 class 1, BS 476, Part 7, 1971. Warrington Fire reasearch, Naval Eng, Stand 713: Issue 3 Grain, Newcastle Occupational Health

Additional certificates and approvals may be available on request.

#### Other variants available

Jotamastic 87 Jotamastic 87 GF

Refer to separate TDS for each variant.

#### **Colors**

aluminum, Aluminum red toned

## **Product data**

Property	Test/Standard	Description	
STANDARD GRADE			
Solids by volume	ISO 3233	87 ± 2 %	
Gloss level (GU 60 °)	ISO 2813	semi gloss (35-70)	
Flash point	ISO 3679 Method 1	104 °F (40 °C)	
Density	calculated	1.5 kg/l	
Region	Regulation	Test Standard	VOC Value

Date of issue: 15 March 2024 Page: 1/6

# **Technical Data Sheet Jotamastic 87 Aluminium**



US CARB(SCM)2020 / SCAQMD rule 1113 Calculated 1.74 lbs/gal

**WINTER GRADE** 

Solids by volume ISO 3233  $77 \pm 2\%$ 

Flash point ISO 3679 Method 1

 $88\ ^{\circ}F\ (31\ ^{\circ}C)$  Density calculated  $1.4\ kg/l$ 

RegionRegulationTest StandardVOC Value

US CARB(SCM)2020 / SCAQMD rule 1113 Calculated 2.05 lbs/gal

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

Gloss description: According to Jotun Performance Coatings' definition.

# Film thickness per coat

#### Typical recommended specification range

#### **STANDARD GRADE**

Dry film thickness 6 mils (150  $\mu$ m) 12 mils (300  $\mu$ m) Wet film thickness 7 mils (170  $\mu$ m) 14 mils (345  $\mu$ m) Theoretical spreading rate 240 ft²/gal (5.8 m²/l) 120 ft²/gal (2.9 m²/l)

#### **WINTER GRADE**

Dry film thickness 6 mils (150  $\mu$ m) - 10 mils (250  $\mu$ m) Wet film thickness 8 mils (195  $\mu$ m) 13 mils (325  $\mu$ m) Theoretical spreading rate 208 ft²/gal (5.1 m²/l) 126 ft²/gal (3.1 m²/l)

# **Surface preparation**

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

#### Surface preparation summary table

Date of issue: 15 March 2024 Page: 2/6

# Technical Data Sheet Jotamastic 87 Aluminium



	Surface preparation		
Substrate	Minimum	Recommended	
Carbon steel	St 2 (ISO 8501-1) or SSPC SP-2	Sa 2 (ISO 8501-1) / SP 6 / NACE No. 3 (SSPC-VIS 1)	
Shop primed steel	Clean, dry and undamaged shop primer (ISO 12944-4 5.4)	Sa 2 (ISO 8501-1) / SP 6 / NACE No. 3 (SSPC-VIS 1)	
Coated surfaces	Clean, dry and undamaged compatible coating	Clean, dry and undamaged compatible coating	

# **Application**

## **Application methods**

The product can be applied by

Spray: Use airless spray (thin 5-10 %).

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)**

#### STANDARD GRADE

Jotamastic 87 Aluminium Comp A 5.5 part(s)
Jotamastic 87 Standard Comp B 1 part(s)

**WINTER GRADE** 

Jotamastic 87 Aluminium Comp A 3.7 part(s)
Jotamastic 87 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

Date of issue: 15 March 2024 Page: 3/6



# **Drying and Curing time**

Temperatures:  $-10^{\circ}\text{C} = 14^{\circ}\text{F} / -5^{\circ}\text{C} = 23^{\circ}\text{F} / 0^{\circ}\text{C} = 32^{\circ}\text{F} / 5^{\circ}\text{C} = 41^{\circ}\text{F} / 10^{\circ}\text{C} = 50^{\circ}\text{F} / 15^{\circ}\text{C} = 59^{\circ}\text{F} / 23^{\circ}\text{C} = 73^{\circ}\text{F} / 35^{\circ}\text{C} = 95^{\circ}\text{F} / 40^{\circ}\text{C} = 104^{\circ}\text{F} / 100^{\circ}\text{C} = 212^{\circ}\text{F} / 100^{\circ}\text{C} = 104^{\circ}\text{F} / 100^{\circ}\text{C} = 104^{\circ}\text{C} = 104^{\circ}\text{F} / 100^{\circ}\text{C} = 104^$ 

Substrate temperature	-5 °C	0 °C	5 °C	10 °C	23 °C	40 °C
STANDARD GRADE						
Surface (touch) dry				8h	4h	2h
Walk-on-dry				24h	10h	4h
Dried to over coat, minimum				24h	10h	4h
Dried/cured for service				14d	7d	2d
WINTER GRADE						
Surface (touch) dry	24h	18h	12h	6h	2.5h	
Walk-on-dry	80h	44h	26h	16h	6h	
Dried to over coat, minimum	80h	44h	26h	16h	6h	
Dried/cured for service	21d	14d	7d	3d	2d	

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**

Temperatures: 15°C = 59°F / 23°C = 73°F

Paint temperature	23 °C
STANDARD GRADE	
Induction time	10 min
Pot life	1.5 h
WINTER GRADE	
Pot life	1 h

Date of issue: 15 March 2024 Page: 4/6



## **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 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 (liters)	Size of containers (liters)
Jotamastic 87 Aluminium Comp A	14.7	20
Jotamastic 87 Standard Comp B	2.7	3
Jotamastic 87 Wintergrade Comp B	4	5

The volume stated is for factory made colors. 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 73°F (23 °C)

Jotamastic 87 Aluminium Comp A	48 month(s)
Jotamastic 87 Standard Comp B	48 month(s)
Jotamastic 87 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.

Date of issue: 15 March 2024 Page: 5/6

This technical data sheet supersedes those previously issued.

# **Technical Data Sheet Jotamastic 87 Aluminium**



#### Note

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.

## **Color variation**

When applicable, products primarily meant for use as primers or antifoulings may have slight color variations from batch to batch. Such products and epoxy based products used as a finish coat may chalk when exposed to sunlight and weathering.

Color and gloss retention on topcoats/finish coats may vary depending on type of color, 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.

Date of issue: 15 March 2024 Page: 6/6