

Technical Data

Jotamastic 90



Product description

Jotamastic 90 is a two-pack surface tolerant, abrasion resistant, high solids, polyamine cured epoxy mastic coating which may be applied in a wide range of film thicknesses. Available with different hardeners for various substrate temperatures, Standard (Std) and Wintergrade (WG). This product is part of a complete system which is certified not to spread flames.

This product is tintable in a wide range of colours in Jotuns Multicolour Industry system. Small colour variations may occur when changing between the two curing agents.

Recommended use

Steel where blast cleaning may not be possible and on hydrojetted surfaces still being moist. Can be used alone or in combination with various systems of primers and topcoats. Gives excellent corrosion protection both in salt and fresh water. If exposed to sunlight chalking may occur.

Film thickness and spreading rate

Std Comp. B	Minimum	Maximum	Typical
Film thickness, dry (µm)	100	300	125
Film thickness, wet (µm)	125	375	155
Theoretical spreading rate (m ² /l)	8	2,7	6,4
WG Comp. B	Minimum	Maximum	Typical
Film thickness, dry (µm)	100	300	125
Film thickness, wet (µm)	125	375	155
Theoretical spreading rate (m ² /l)	8	2,7	6,4

Physical properties

Colour	Wide range of colours over Multicolour tinting system (MCI)
Solids (vol %)*	80 ± 2 Std Comp. B 80 ± 2 WG Comp. B
Flash point	Std Comp. B: 35°C ± 2 (Setaflash) WG Comp. B: 35°C ± 2 (Setaflash)
VOC	Std Comp. B 2,25 lbs/gal (270 gms/ltr) USA-EPA Method 24 170 gms/ltr UK-PG6/23(97). Appendix 3 WG Comp. B 1,84 lbs/gal (220 gms/ltr) USA-EPA Method 24 180 gms/ltr UK-PG6/23(97). Appendix 3
Gloss	Semigloss
Gloss retention	Fair
Water resistance	Excellent
Abrasion resistance	Very good
Solvent resistance	Good
Chemical resistance	Very good
Flexibility	Good

*Measured according to ISO 3233:1998 (E)

Hong Kong rules:

Category of paints - Other vessel coatings; VOC 270 gms/ltr HK EPD method (Ready to use); Exempt compound - N/A; Specific gravity: 1.43 gms/ltr (A+B); Both VOC and Specific gravity values provided are typical values, subject to changes when different colour involved.

Surface preparation

All surfaces should be clean and free from contamination. The surface should be assessed and treated in accordance with ISO 8504.

Bare steel

Cleanliness: Power tool cleaning to min. St 2, mill scale free (ISO 8501-1:2007). Improved surface treatment (blast cleaning to Sa 2½) will improve the performance. In case of waterjetting the flash rust degree shall not exceed M (moderate) in SSPC and NACE standards for waterjetted surfaces.

Shopprimed steel

Clean, dry and undamaged approved shopprimer.

Coated surfaces

Clean, dry and undamaged compatible primer. Contact your local Jotun office for more information. For maintenance UHPWJ to WJ2 (NACE No.5/SSPC-SP 12) or Power tool cleaning to min. St 2 for rusted areas

Other surfaces

The coating may be used on other substrates. Please contact your local Jotun office for more information.

Condition during application

The temperature of the substrate should be minimum +5°C (Std) (-5°C in WG) and at least 3°C above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. Good ventilation is required in confined areas to ensure proper drying.

Hydrojetting of steel surface makes a wet surface. The surrounding air must have a relative humidity not exceeding 85 %. Before painting the surface shall not be glossy with moisture, but can have a patchy appearance.

Application methods

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 but not recommended for first primer coat, however when using roller application care must be taken to apply sufficient material in order to achieve the specified dry film thickness.

Application data

Mixing ratio (volume)	Std Comp. B: 3.5:1 WG Comp. B: 3.5:1
Mixing	3.5 parts Comp. A (base) to be mixed thoroughly with 1 part Jotamastic 90, Std Comp. B (curing agent). 3.5 parts Comp. A (base) to be mixed thoroughly with 1 part Jotamastic 90, WG Comp. B (curing agent).
Pot life (23°C)	Std Comp. B: 2 hours WG Comp. B: 45 minutes
Thinner/Cleaner	Jotun Thinner No. 17
Guiding data airless spray	
Pressure at nozzle	15 MPa (150 kp/cm ² , 2100 psi).
Nozzle tip	0.46-0.79 mm (0.018-0.031")
Spray angle	40-80°
Filter	Check to ensure that filters are clean.
Note	* The temperature of the mixture of base and curing agent is recommended to be at least 10°C, otherwise extra solvent may be required to obtain correct viscosity. * Too much solvent results in lower sag resistance and slower cure. * If extra solvent is necessary, this should be added after mixing of the two components.

Drying time

Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with:

- * Good ventilation (Outdoor exposure or free circulation of air)
- * Typical film thickness
- * One coat on top of inert substrate

Std Comp. B

Substrate temperature	5°C	10°C	23°C	40°C
Surface dry	20 h	12 h	4 h	1,5 h
Through dry ¹	40 h	20 h	6 h	3 h
Cured	28 d	14 d	7 d	2 d
Dry to recoat, minimum ²	30 h	10 h	3 h	1,5 h
Dry to recoat, maximum ³				

WG Comp. B

Substrate temperature	-5°C	0°C	5°C	10°C	23°C
Surface dry	24 h	18 h	12 h	8 h	3,5 h
Through dry ¹	72 h	30 h	20 h	12 h	4 h
Cured	21 d	14 d	10 d	5 d	3 d
Dry to recoat, minimum ²	54 h	20 h	10 h	6 h	2 h
Dry to recoat, maximum ³					

Special conditions for USA

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

1. The earliest time that it is possible to exert mechanical strain on the coating, i.e. walk on to recoat.
2. The earliest time for recoating with the same generic type of paint. Note that the paint film is not hard at this time and can not withstand mechanical strain or handling.
3. The best intercoat adhesion occurs when the surface is free from chalking and other contamination, prior to application and when the subsequent coat is applied before underlying coat has cured. If the coating has been exposed to direct sunlight for some time, special attention must be paid to surface cleaning and mattening/removal of the surface layer in order to obtain physical adhesion

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

Typical paint system

Jotamastic 90	2 x 125 µm	(Dry Film Thickness)
Hardtop AS/XP	1 x 50 µm	(Dry Film Thickness)

Other systems may be specified, depending on area of use

Storage

The product must be stored in accordance with national regulations. Storage conditions are to keep the containers in a dry, cool, well ventilated space and away from source of heat and ignition. Containers must be kept tightly closed.

Handling

Handle with care. Stir well before use.

Packing size

20 litre unit: 15.6 litres Comp. A in a 20 litre container and 4.4 litres Jotamastic 90, Std Comp. B (curing agent) in a 5 litre container.

4.55 litre unit: 3.55 litres Comp. A in a 5 litre container and 1 litres Jotamastic 90, Std Comp. B (curing agent) in a 1 litre container.

20 litre unit: 15.6 litres Comp. A in a 20 litre container and 4.4 litres Jotamastic 90, WG Comp. B (curing agent) in a 5 litre container.

4.55 litre unit: 3.55 litres Comp. A in a 5 litre container and 1 litres Jotamastic 90, WG Comp. B (curing agent) in a 1 litre container.

Health and safety

Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not breathe or inhale 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.

For detailed information on the health and safety hazards and precautions for use of this product, we refer to the Material Safety Data Sheet.

DISCLAIMER

The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product can be used under conditions beyond our control, we can only guarantee the quality of the product itself. We also reserve the right to change the given data without notice. Minor product variations may be implemented in order to comply with local requirements.

If there is any inconsistency in the text the English (UK) version will prevail.

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