

Technical Data

WaterFine Barrier



Product description

WaterFine Barrier is a three-pack, zinc rich water borne epoxy primer, that cures down to 10°C . Complies with SSPC 20:1982.

Recommended use

As primer on steel in a complete water borne corrosion resistant paint system. Can also be used in systems together with suitable solvent borne coatings, such as epoxy, acrylics etc. Not to be overcoated with alkyds.

Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry (µm)	50	90	60
Film thickness, wet (µm)	90	160	110
Theoretical spreading rate (m ² /l)	11,2	6,2	9,3

Comments

VOC: 117 g/l (Actual).

Physical properties

Colour	Red (toned)
Solids (vol %)*	56 ± 2
Flash point	Non flammable
Gloss	Flat
Water resistance	Very good
Abrasion resistance	Good
Solvent resistance	Very good
Flexibility	Fair

*Measured according to ISO 3233:1998 (E)

Surface preparation

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

Bare steel

Cleanliness: Blast cleaning to min. Sa 2 ½ (ISO 8501-1:2007) or for maintenance UHPWJ to WJ2 (NACE No.5/SSPC-SP 12). Roughness: using abrasives suitable to achieve grade Fine to Medium G (30-85 µm, Ry5) (ISO 8503-2)

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 10°C 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 usually required in confined areas to ensure proper drying. The coating should not be exposed to oil, chemicals or mechanical stress until fully cured.

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)	6.3 litres Comp. A (Epoxy base) to be mixed thoroughly with 1.4 litres Comp. B (Curing agent). This mixture slowly to be added to Comp C (Zinc powder) during stirring using mechanical equipment. Mix thoroughly until free from lumps. This gives 10 litre ready mixed paint. It is recommended to pass the mixture through a 50 mesh sieve before use. It is also recommend to continuously stir the paint at low speed during application in order to prevent the heavy zinc particles from settling.
Mixing	½ hour prior to use.
Pot life (23°C)	6 hours
Thinner/Cleaner	Water Fresh clean water
Cleaner	Fresh clean water and Jotun Thinner No. 4
Guiding data airless spray	
Pressure at nozzle	15 MPa (150 kp/cm ² 2100 psi)
Nozzle tip	0.38-0.53 mm (0.017-0.023").
Spray angle	40-80°
Filter	Make certain that the filters are perfectly clean.

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
- * Relative Humidity 50%.

Substrate temperature	10°C	23°C	40°C
Surface dry	35 min	15 min	15 min
Through dry	40 h	4 h	3 h
Cured	14 d	7 d	5 d
Dry to recoat, minimum	3 h	2 h	1,5 h

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

Corrosivity category C5-I (ISO 12944), (System 1, NORSOK M-501):

WaterFine Barrier	1 x 50 µm	(Dry Film Thickness)
WaterFine Primer	1 x 120 µm	(Dry Film Thickness)
WaterFine Topcoat	1 x 80 µm	(Dry Film Thickness)

For transport containers:

WaterFine Barrier	1 x 60 µm	(Dry Film Thickness)
WaterFine Topcoat Semigloss	1 x 80 µm	(Dry Film Thickness)

Other systems may be specified, depending on area of use

Procedure for preparation and cleaning of application equipment

To avoid solvent contamination of the water borne paint the spraying equipment has to be conditioned before use. All equipment containing solvents in the pump, hoses and gun have to be thoroughly cleaned according to the following instructions.

If the application equipment is made in stainless steel, designed for and only used for application of water borne coatings this preparation and cleaning procedure is not needed.

Before spraying:

Circulate Jotun Thinner No. 17 through the equipment and hoses. Then Jotun Thinner No. 4 before fresh clean water.

After spraying:

Clean the equipment and hoses with water and alkaline detergent (Kraftvask), then circulate Jotun Thinner No. 4 and finally Jotun Thinner No. 17.

Storage

Storage conditions are to keep the container in a dry, cool well ventilated space and away from source of heat and ignition and in accordance to national regulations. Containers must be kept tightly closed and kept away from freezing. Shelf life at 23°C: Comp. A, 2 years; Comp. B, 2 years; Comp. C, 4 years. Subject to re-inspection thereafter. Storage at elevated temperatures will reduce product shelf life significantly.

Handling

Handle with care. Stir well before use. Continuous stirring during application will prevent the heavy zinc pigment from settling.

Packing size

6.3 litre Comp. A, 1.4 litre Comp. B and 16.9 kg Comp. C. (Together 10 l paint)
Packing may vary from country to country according to local requirements.

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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ISSUED 26 NOVEMBER 2010 BY JOTUN
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