

WaterFine Barrier

Product description

This is a three component waterborne polyamide cured zinc rich epoxy coating. It is a very fast drying, very high zinc dust containing product. It conforms to the compositional requirements of SSPC paint 20, level 2. It provides very good corrosion protection as part of a complete coating system. To be used as primer in atmospheric environments. Suitable for carbon steel, repair of inorganic zinc silicate coating and damaged galvanised steel substrates.

Typical use

Protective:

Suitable for structural steel and piping exposed in corrosivity categories up to C5 (ISO 12944-2). Recommended for offshore environments, refineries, power plants, bridges, buildings, mining equipment and general structural steel. Specially designed as a primer for coating systems where extended durability is required.

Approvals and certificates

This product contributes to the Green Buildings Standard credits. Please see section Green Building Standards.

Pre-qualification testing in accordance with NORSOK M-501, Rev. 4, System 1, suitable for exterior exposure in offshore environment, below 120 °C.

Additional certificates and approvals may be available on request.

Colours

red toned

Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	56 ± 2 %
Gloss level (GU 60 °)	ISO 2813	matt (0-35)
Density	calculated	2.5 kg/l
VOC-US/Hong Kong	US EPA Method (theoretical) (CARB(SCM)2007, SCAQMD rule 1113, Hong Kong)	205 g/l
VOC-EU	IED (2010/75/EU) (theoretical)	117 g/l
VOC-EU	EU VOC Directive 2004/42/CE (theoretical)	117 g/l

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

All data is valid for mixed paint.

Gloss description: According to Jotun Performance Coatings' definition.

Film thickness per coat

Typical recommended specification range

Dry film thickness	50 - 90	µm
Wet film thickness	90 - 160	µm
Theoretical spreading rate	11.2 - 6.2	m ² /l

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	Sa 2½ (ISO 8501-1)	Sa 2½ (ISO 8501-1)
Galvanised steel	Cleanliness corresponding to description of Sa 1 (ISO 8501-1)	Cleanliness corresponding to description of Sa 1 (ISO 8501-1)
Shop primed steel	Clean, dry and undamaged approved shop primer (ISO 12944-4 5.4)	Sa 2 (ISO 8501-1)

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

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)

WaterFine Barrier Comp A	6.3 part(s)
WaterFine Barrier Comp B	1.4 part(s)
WaterFine Barrier Comp C	2.4 part(s)

Thinner/Cleaning solvent

Thinner: Water
Cleaning solvent: Water / Jotun Thinner No. 4

Jotun Thinner No. 28 can replace Jotun Thinner No. 4 as an alternative cleaning solvent.

When thinners are used as a cleaning solvent, the use must be in accordance with prevailing local regulations.

Guiding data for airless spray

Nozzle tip (inch/1000): 17-23
Pressure at nozzle (minimum): 150 bar/2100 psi

Drying and Curing time

Substrate temperature	10 °C	23 °C	40 °C
Surface (touch) dry	35 min	15 min	15 min
Walk-on-dry	40 h	4 h	3 h
Dry to over coat, minimum	3 h	2 h	1.5 h
Dried/cured for service	14 d	7 d	5 d

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

Paint temperature	23 °C
Pot life	6 h

Heat resistance

	Temperature	
	Continuous	Peak
Dry, atmospheric	120 °C	-

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:	inorganic zinc shop primer
Subsequent coat:	acrylic, epoxy, epoxy mastic, polyurethane

Packaging (typical)

	Size of containers (litres)	
WaterFine Barrier Comp A	6.3 l	10
WaterFine Barrier Comp B	1.4 l	2
WaterFine Barrier Comp C	2.4 l / 16.9 kg	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

WaterFine Barrier Comp A	24 month(s)
WaterFine Barrier Comp B	24 month(s)
WaterFine Barrier Comp C	48 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.

Green Building Standards

This product contributes to Green Building Standard credits by meeting the following specific requirements:

LEED®v4 (2013)

EQ credit: Low emitting materials

- VOC content for Zinc-rich IM Primers (340 g/l) (CARB(CSM)2007) and emission lower than or equal to 0.5 mg/m³ (CDPH method 1.1).

MR credit: Building product disclosure and optimization

- Material Ingredients, Option 2: Material Ingredient Optimization, International Alternative Compliance Path -

REACH optimization: Fully inventoried chemical ingredients to 100 ppm and not containing substances on the REACH Authorization list – Annex XIV, the Restriction list – Annex XVII and the SVHC candidate list.

- Environmental Product Declarations. Product-specific Type III EPD (ISO 14025;21930, EN 15804).

BREEAM® International (2016)

- Mat 01: Product-specific Type III EPD (ISO 14025;21930, EN 15804).

BREEAM® International (2013)

- Hea 02: VOC content for Two-pack performance coating WB (140 g/l) (EU Directive 2004/42/CE)

This product is tested by RISE Research Institutes of Sweden/SP Technical Research Institute of Sweden or Eurofins in accordance with California Department of Public Health (CDPH) Standard Method v1.1-2010.

The EPDs are available at www.epd-norge.no

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.

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 antifouling may have slight colour variations from batch to batch. Such products may fade and 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., and application quality. 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.

Technical Data Sheet

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