

# Technical Data

## NAVIGUARD



### Product description

Naviguard is a solvent free, two-pack epoxy coating.

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**If used in tanks for potable water, the paint shall not be thinned and washing procedure must be adhered to.**

### Recommended use

A mechanically very strong, high build, high solids coating for steel below and above water. It has also very good chemical resistance and is suitable as anode shield in impressed current systems.

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### Film thickness and spreading rate

|  | Minimum | Maximum | Typical |
|--|---------|---------|---------|
| Film thickness, dry (µm)                       | 200     | 500     | 300     |
| Film thickness, wet (µm)                       | 200     | 500     | 300     |
| Theoretical spreading rate (m <sup>2</sup> /l) | 5       | 2       | 3,3     |

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### Physical properties

|  |                    |
|--|--------------------|
| Colour                                 | Red, White         |
| Solids (vol %)*                        | 100 ±              |
| Flash point                            | >100°C (Setaflash) |
| Gloss                                  | Glossy             |
| Gloss retention                        | Fair               |
| Water resistance                       | Excellent          |
| Abrasion resistance                    | Excellent          |
| Solvent resistance                     | Excellent          |
| Chemical resistance                    | Excellent          |
| Flexibility                            | Fair               |
| Compatibility with cathodic protection | Excellent          |

\*Measured according to ISO 3233:1998 (E)

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### 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 Sa 2½ (ISO 8501-1:1988). Roughness: using abrasives suitable to achieve grade Fine to Medium G (30-85 µm, Ry5) (ISO 8503-2)

#### Coated surfaces

Clean, dry and undamaged compatible primer. Contact your local Jotun office for more information.

#### 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. The coating should not be exposed to oil, chemicals or mechanical stress until fully cured.

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## Application methods

|              |   |
|--------------|---|
| <b>Spray</b> | Two-comp. heated airless spray. If permitted, thin 10%, to use normal airless spray                             |
| <b>Brush</b> | Recommended for stripe coating and small areas, care must be taken to achieve the specified dry film thickness. |

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## Application data

|                                   |  |
|-----------------------------------|--|
| <b>Mixing ratio (volume)</b>      | 3 parts Comp. A (base) to be mixed thoroughly with 1 part Comp. B (curing agent) |
| <b>Pot life (23°C)</b>            | In two-comp. spray at 60°C - 5 minutes. If thinned 10%, 30 minutes at 23°C.      |
| <b>Thinner/Cleaner</b>            | Jotun Thinner No. 17   |
| <b>Guiding data airless spray</b> |  |
| <b>Pressure at nozzle</b>         | 20 MPa (200 kp/cm <sup>2</sup> 2800 psi)   |
| <b>Nozzle tip</b>                 | 0.53-0.79 mm (0.021-0.031")  |
| <b>Spray angle</b>                | 40-80°   |
| <b>Filter</b>                     | Check to ensure that filters are clean.  |

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## 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

| <b>Substrate temperature</b>               | <b>10°C</b> | <b>23°C</b> | <b>40°C</b> |
|--|-------------|-------------|-------------|
| <b>Surface dry</b>                         | 8 h         | 4 h         | 3,5 h       |
| <b>Through dry</b>                         | 20 h        | 10 h        | 4 h         |
| <b>Cured</b>                               | 14 d        | 7 d         | 3 d         |
| <b>Dry to recoat, minimum</b>              | 20 h        | 10 h        | 4 h         |
| <b>Dry to recoat, maximum</b> <sup>1</sup> | 5 d         | 3 d         | 2 d         |

1. The surface should be free from chalking and contamination prior to application. If the maximum dry to recoat time is exceeded, please contact Jotun Paints for advice.

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

On Sa 2½ or intact dry, clean shopprimer:

**Naviguard**                      **1 - 2 x 300 µm**                      **(Dry Film Thickness)**

When used as impressed current anode shield coating on Sa 2½:

**Naviguard**                      **2 x 500 µm**                      **(Dry Film Thickness)**

Other systems may be specified, depending on area of use

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## SPECIAL WASHING PROCEDURE WHEN THIS PRODUCT IS USED IN TANKS FOR POTABLE WATER

After the paint is cured (see drying/curing time above) under good ventilation, the tank shall be thoroughly washed with fresh 50 - 80°C water. The wash water must be renewed (replaced) during this process. Then the tank is filled with water. Repeat the procedure (washing/filling water) three times.

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## 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.

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## Handling

Handle with care. Stir well before use.

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## Packing size

20 litre unit: 12 litres Comp. A (base) in a 20 litre container and 4 litres Comp. B (curing agent) in a 5 litre container

Packing may vary from country to country according to local requirements.

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## 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.**

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## 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 is often used under conditions beyond our control, we cannot guarantee anything but the quality of the product itself. We reserve the right to change the given data without notice.*

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