

# Technical Data

## Tankguard Plus



### Product description

This is a two component novolac epoxy coating with high resistance to a wide range of chemicals and solvents including sour crude oil up to 160 °C.

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### Recommended use

Designed for tank lining for long term storage of a wide range of chemicals. It is also designed to tolerate crude oil at temperatures of up to 160°C. For details regarding storage of various other cargoes reference is made to the separate Tankcoating Resistance List.

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### Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry (µm)	100	150	125
Film thickness, wet (µm)	140	215	180
Theoretical spreading rate (m <sup>2</sup> /l)	7	4,7	5,6

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### Approvals

Food Contact - FDA Compliant in accordance with section 175.300 of the Code of Federal Regulations

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## Physical properties

<b>Colour</b>	Buff, White
<b>Solids (vol %)*</b>	70 ± 2
<b>Flash point</b>	28 °C ± 2 (Setaflash)
<b>VOC</b>	2,5 lbs/gal (300 gms/ltr) USA-EPA Method 24 270 gms/ltr UK-PG6/23(97). Appendix 3
<b>Gloss</b>	Semigloss
<b>Water resistance</b>	Excellent
<b>Solvent resistance</b>	Excellent
<b>Chemical resistance</b>	Excellent
<b>Flexibility</b>	Fair

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

Hong Kong rules: Category of paints - Tank lining coatings; VOC 300 gms/ltr HK EPD method (Ready to use); Exempt compound - N/A; Specific gravity: 1.57 (A+B); Both VOC and Specific gravity values provided are typical values, which will vary according to colour chosen.

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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 min. Sa 2 ½ (ISO 8501 1:2007). Roughness: using abrasives suitable to achieve Grade Medium G (50 - 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.

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## Condition during application

The temperature of the substrate should be minimum 5°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 cured.

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## Application methods

<b>Spray</b>	Use 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>	4:1
<b>Mixing</b>	4 parts Comp. A (base) to be mixed thoroughly with 1 part Tankguard Plus, Comp. B (curing agent)
<b>Induction time</b>	15 minutes.
<b>Pot life (23°C)</b>	2 hours (Reduced at higher temp.)
<b>Thinner/Cleaner</b>	Jotun Thinner No. 23
<b>Guiding data airless spray</b>	
<b>Pressure at nozzle</b>	15 MPa (150 kp/cm <sup>2</sup> , 2100 psi)
<b>Nozzle tip</b>	0.46-0.69 mm (0.018-0.027")
<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>5°C</b>	<b>10°C</b>	<b>15°C</b>	<b>23°C</b>	<b>40°C</b>
<b>Surface dry</b>	24 h	16 h	6 h	4 h	2 h
<b>Through dry</b>	36 h	24 h	10 h	7 h	3 h
<b>Cured</b>	30 d	14 d	10 d	7 d	3 d
<b>Dry to recoat, minimum</b>	52 h	36 h	30 h	20 h	10 h
<b>Dry to recoat, maximum <sup>1</sup></b>	30 d	30 d	25 d	21 d	7 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 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.

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## Typical paint system

### Tankguard Plus 2 x 125 µm (Dry Film Thickness)

Tankguard Holding Primer 1 x 40 µm can be used as a temporary protection and is fully compatible with the tank coating system

For touch up, stripe coating and minor repair work, Tankguard TU can be used.

**Other systems may be specified, depending on area of use**

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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: 16 litres Comp. A (base) in a 20 litre container and 4 litres Tankguard Plus, Comp. B (curing agent) in a 5 litre container.

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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 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 4 JULY 2013 BY JOTUN  
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