

Technical Data

Jotaguard FD



Product description

Jotaguard FD is a two-pack coal-tar epoxy coating applicable at low temperature.

Recommended use

Steel structures permanently or frequently submerged in water, inside crude oil tanks, sewage treatment plants, buried concrete structures etc. Excellent in combination with cathodic protection.

Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry (µm)	100	200	125
Film thickness, wet (µm)	150	300	190
Theoretical spreading rate (m ² /l)	6,7	3,4	5,4

Physical properties

Colour	Black and Brown.
Solids (vol %)*	67 ± 2
Flash point	25°C ± 2 (Setaflash)
Gloss	Semiflat
Water resistance	Excellent
Abrasion resistance	Good
Solvent resistance	Good
Chemical resistance	Good
Flexibility	Good
Compatibility with cathodic protection	Very good

*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 Sa 2½ (ISO-8501-1:2007). Power tool cleaning to min. St 2 (ISO 8501-1:2007) may be acceptable, subject to exposure conditions.

Other surfaces

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

Condition during application

This product does not cure properly at the temperature below -5°C. The temperature of the substrate should be minimum 3°C above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. The moisture content in the concrete should not exceed 4 % (by weight). 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.

Application data

Mixing ratio (volume)	3 parts Comp. A (base) to be thoroughly mixed to 1 part Comp. B (curing agent).
Pot life (23°C)	3 hours. (Reduced at higher temp.) 5 hours at 10°C.
Thinner/Cleaner	Jotun Thinner No. 17
Guiding data airless spray	
Pressure at nozzle	15 MPa (150 kp/cm ² , 2100 psi.).
Nozzle tip	0.53 - 0.79 mm (0.021-0.031")
Spray angle	40-80°
Filter	Check to ensure that filters are 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

Substrate temperature	5°C	10°C	23°C	40°C
Surface dry	10 h	8 h	5 h	3 h
Through dry	24 h	18 h	12 h	8 h
Cured	9 d	7 d	5 d	4 d
Dry to recoat, minimum	24 h	18 h	12 h	8 h
Dry to recoat, maximum ²	10 d	7 d	7 d	5 d
Substrate temperature	-5°C			
Surface dry	16 h			
Through dry	48 h			
Cured	h			
Dry to recoat, minimum	36 h			
Dry to recoat, maximum ¹	14 d			

1. Provided the surface is free from chalking and other contamination prior to application, there is normally no overcoating time limit. Best intercoat adhesion occurs, however, when the subsequent coat is applied before preceding 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 good 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

For A/F scheme:

Jotaguard FD	1 x 125 µm	(Dry Film Thickness)
Safeguard FD	1 x 125 µm	(Dry Film Thickness)

Ballast tank:

Jotaguard FD	2 x 150 µm	(Dry Film Thickness)
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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

15 litres Comp. A (base) in a 20 litre container and 5 litres Std Comp. B (curing agent) in a 5 litre container.

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 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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ISSUED 6 DECEMBER 2007 BY JOTUN
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