

# Technical Data

## Hardtop F10



### Product description

Hardtop F10 is a two-pack, fluoro polymer topcoat with outstanding gloss and colour retention, and in compliance with the requirements of TB/T 1527-2004 and HG/T 3792-2005.

### Recommended use

As topcoat over an epoxy / epoxy mastic system, where long term aesthetic performance is required in aggressive atmospheric exposure. Over-coating on polyurethane topcoat is also possible.

### Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry ( $\mu\text{m}$ )	25	35	30
Film thickness, wet ( $\mu\text{m}$ )	65	90	75
Theoretical spreading rate ( $\text{m}^2/\text{l}$ )	16	11,4	13,3

### Physical properties

Colour	According to Multicolour Tinting System (MCI)
Solids (vol %)*	40 $\pm$ 2
Flash point	26°C $\pm$ 2 (Setaflash)
VOC	528 gms/ltr UK-PG6/23(97). Appendix 3
Gloss	Glossy
Gloss retention	Excellent
Water resistance	Very good
Abrasion resistance	Very good
Chemical resistance	Very good
Flexibility	Excellent

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

Fluoro content (%): = 25

### Surface preparation

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

#### Coated surfaces

Clean, dry and undamaged compatible primer. Please 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 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 required in confined areas to ensure correct drying.

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## Application methods

<b>Spray</b>	Use airless spray or conventional spray
<b>Brush</b>	Recommended for stripe coating and small areas, care must be taken to achieve the specified dry film thickness.
<b>Roller</b>	May be used. However when using roller application care must be taken to apply sufficient material in order to achieve the specified dry film thickness.

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## Application data

<b>Mixing ratio (volume)</b>	17:1
<b>Mixing</b>	17 parts of Comp. A (base) to be mixed thoroughly with 1 part of Hardtop F10, Comp. B (curing agent) with a mechanical stirrer with continuous stirring for at least 2 minutes.
<b>Pot life (23°C)</b>	5 hours (Reduced at higher temperature)
<b>Thinner/Cleaner</b>	Jotun Thinner No. 10
<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>	0.33-0.38 mm (0.013-0.015")
<b>Spray angle</b>	40-80°
<b>Filter</b>	Check to ensure that filters are clean.
<b>Note</b>	General recommendation for hot work on fluoro containing materials is to remove minimum ten centimeters of material around the hot work area.

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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>23°C</b>	<b>40°C</b>
<b>Surface dry</b>	2 h	1 h	30 min	30 min
<b>Through dry</b>	28 h	14 h	7 h	3.5 h
<b>Cured</b>	15 d	10 d	5 d	2 d
<b>Dry to recoat, minimum</b>	28 h	14 h	7 h	3.5 h
<b>Dry to recoat, maximum <sup>1</sup></b>				

1. The surface should be dry and free from any contamination or chalking, and if necessary, sufficiently roughened prior to application of the subsequent coat.
2. Early exposure to condensation (high humidity, low temperature) may cause colour and/or gloss variations.

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

Barrier 77	1 x 50 µm	(Dry Film Thickness)
Penguard Express	1 x 150 µm	(Dry Film Thickness)
<b>Hardtop F10</b>	<b>2 x 30 µm</b>	<b>(Dry Film Thickness)</b>

Barrier 77	1 x 50 µm	(Dry Film Thickness)
Penguard Express	1 x 150 µm	(Dry Film Thickness)
Hardtop XP	1 x 60 µm	(Dry Film Thickness)
<b>Hardtop F10</b>	<b>1 x 30 µm</b>	<b>(Dry Film Thickness)</b>

Jotacote Universal and Jotamastic 87 can also be used as primer.

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: 17,0 litres Hardtop F10 Comp. A in a 20 litre container and 1 litre Hardtop F10 Comp. B in a 1 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 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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