

Technical Data

Hardtop Flexi



Product description

Hardtop Flexi is a two component, high solid, flexible polyurethane coating with good gloss and colour retention. Hardtop Flexi bases are intermediates and need to be processed before use.

Recommended use

Hardtop Flexi can be used as a single coat system in atmospheric corrosivity classes C2 and C3. Can also be used as a topcoat in classes C2 - C4 and C5-I and C5-M on various primers and as maintenance coating on old paint surfaces. Hardtop Flexi has a good impact resistance and painted objects can be stacked after short drying time.

The product have built in good corrosion protection and is also suitable as a single product system for maintenance application when both corrosion protection and topcoat performance are desired.

Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry (μm)	50	150	80
Film thickness, wet (μm)	80	230	125
Theoretical spreading rate (m^2/l)	13	4,3	8,2

Physical properties

Colour	According to color card and Multicolor tinting system (MCI)
Solids (vol %)*	64 \pm 2
Flash point	25°C \pm 2 (Setaflash)
VOC	2,8 lbs/gal (336 gms/ltr) USA-EPA Method 24 310 gms/ltr UK-PG6/23(97). Appendix 3
Gloss	Glossy
Gloss retention	Good
Water resistance	Very good
Abrasion resistance	Very good
Chemical resistance	Good
Flexibility	Excellent

*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.

Shoppripped steel

Clean, dry and undamaged shopprimer. Corroded and damaged areas to be blast cleaned to min. Sa 2½ (ISO 8501-1:2007).

Coated surfaces

If applied on top of old coating systems (i.e. epoxy or polyurethane), it may be necessary to abrade the surface.

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.

Application methods

Spray	Use airless spray
Brush	May be used but care must be taken to achieve the specified dry film thickness.
Roller	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.

Application data

Mixing ratio (volume)	4:1
Mixing	4 part comp. A (base) to be mixed thoroughly with 1 part Hardtop Flexi, Comp. B (curing agent)
Pot life (23°C)	2 hour (Reduced at higher temp.)
Thinner/Cleaner	Jotun Thinner No. 10
Guiding data airless spray	
Pressure at nozzle	15 MPa min (150 kp/cm ² , 2100 psi).
Nozzle tip	0,28 - 0,38 mm (0,011 - 0,017").
Spray angle	40-80°
Filter	Check to ensure that filters are clean.
Note	Depending on working condition, temperature, application equipment etc., it may be necessary to adjust the viscosity by adding from 0 up to 10% Jotun Thinner No. 10. Jotun Thinner No. 26 is supplied and used in USA due to legislation.

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	6 h	3 h	1,5 h	1 h
Through dry	16 h	8 h	4 h	2 h
Cured	15 d	10 d	7 d	4 d
Dry to recoat, minimum	12 h	6 h	3 h	1,5 h
Dry to recoat, maximum ¹				

1. The surface must be free from any chalking or any other contamination and if necessary, sufficiently roughened prior to application.

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

As a primer/DTM in atmospheric corrosivity classes C2 and C3, ref. ISO 12944.

Hardtop Flexi **1 x 80 µm** **(Dry Film Thickness)**

As a topcoat in atmospheric corrosivity classes C2 - C4, ref. ISO 12944.

Penguard Express 1 x 125 µm (Dry Film Thickness)

Hardtop Flexi **1 x 80 µm** **(Dry Film Thickness)**

As a topcoat in corrosivity classes C5-I and C5-M, ref. ISO 12944.

Jotacote Universal 2 x 100 µm (Dry Film Thickness)

Hardtop Flexi **1 x 80 µm** **(Dry Film Thickness)**

Note: To obtain full coverage an extra coat may be necessary, especially for signal colours in red, orange and yellow.
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

16 litres Comp. A in a 20 litre container and 4 litres Hardtop Flexi Comp. B in a 5 litre container
4 litres Comp. A in a 5 litre container and 1 litres Hardtop Flexi Comp. B in a 1 litre container

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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