

Technical Data

Hardtop Ultra



Product description

Hardtop Ultra is a two-pack polyurethane topcoat suitable for application by brush or roller with excellent gloss and colour retention.

Recommended use

As topcoat over an epoxy/ epoxymastic system where a durable, high gloss finish is required in aggressive atmospheric exposure. Cures at low temperatures.

Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry (μm)	30	75	50
Film thickness, wet (μm)	58	145	100
Theoretical spreading rate (m^2/l)	17,3	6,9	10,4

Physical properties

Colour	According to colour card and MCI
Solids (vol %)*	52 \pm 2
Flash point	35°C \pm 2 (Setaflash)
VOC	415 gms/ltr UK-PG6/23(97). Appendix 3
Gloss	Glossy
Gloss retention	Very good
Water resistance	Very good
Abrasion resistance	Very good
Solvent resistance	Very good
Chemical resistance	Very good
Flexibility	Good

*Measured according to ISO 3233:1998 (E)

Surface preparation

The surface must be clean and dry. Surface contamination is to be removed by detergents and fresh water cleaning.

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 usually required in confined areas to ensure proper drying. The coating should not be exposed to oil, chemicals or mechanical stress until cured.

Application methods

Spray	Use airless spray or conventional spray
Brush	Recommended
Roller	Recommended

Application data

Mixing ratio (volume)	4:1
Mixing	4 parts of Comp. A (base) to be mixed thoroughly with 1 part Hardtop Ultra, Comp. B (curing agent)
Pot life (23°C)	4 hours (Reduced at higher temp.).
Thinner/Cleaner	Jotun Thinner No. 10/18 No. 10 for spraying and No. 18 for brushing and rolling.
Guiding data airless spray	
Pressure at nozzle	15 MPa (150 kp/cm ² , 2100 psi).
Nozzle tip	0.33-0.46 mm (0.013-0.018").
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	12 h	8 h	3 h	1 h
Through dry	32 h	16 h	8 h	4 h
Cured	16 d	10 d	5 d	2 d
Dry to recoat, minimum	20 h	10 h	5 h	2,5 h
Dry to recoat, maximum ¹				

1. Evaluated according to BS 3900 Part C2
2. Evaluated according to BS 3900 Part C3
3. Recommended data given for recoating with the same generic type of paint.
4. The surface should be free from chalking and contamination prior to application. Best intercoat adhesion occurs when the subsequent coat is applied before the preceding coat is cured. If this is exceeded it may be necessary to roughen the surface.
5. 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.

Typical paint system

Jotamastic 87	2 x 200 µm	(Dry Film Thickness)
Hardtop Ultra	1 x 50 µm	(Dry Film Thickness)

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

20 litre unit: 16 litres Comp. A in a 20 litre container and 4 litres Hardtop Ultra, Comp. B in a 5 litre container.
or
5 litre unit: 4 litres Comp. A in a 5 litre container and 1 litre Hardtop Ultra, 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 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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