

# Technical Data

## Hardtop AS Clear



### Product description

Hardtop AS Clear is a two-pack high gloss, high performance polyurethane clearcoat with excellent gloss retention.

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### Recommended use

As clear coat over a polyurethane system, metallic finishes or an epoxy/epoxy mastic system, where a durable, high gloss finish is required in aggressive environment.

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### Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry ( $\mu\text{m}$ )	15	50	25
Film thickness, wet ( $\mu\text{m}$ )	25	75	50
Theoretical spreading rate ( $\text{m}^2/\text{l}$ )	28,6	12,3	17,2

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### Physical properties

Colour	Colourless
Solids (vol %)*	43 $\pm$ 2
Flash point	26°C $\pm$ 2 (Setaflash)
VOC	426 gms/ltr UK-PG6/23(97). Appendix 3
Gloss	Glossy
Gloss retention	Excellent
Water resistance	Very good
Abrasion resistance	Very good
Flexibility	Very good

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

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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.

#### 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.

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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 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>	Use 2 mm nap foam rollers or 5 mm nap natural hair rollers.

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## Application data

<b>Mixing ratio (volume)</b>	3:1
<b>Mixing</b>	3 parts Comp. A (base) to be mixed thoroughly with 1 part Hardtop AS/HB, Comp B (curing agent).
<b>Induction time</b>	10 minutes.
<b>Pot life (23°C)</b>	3 hours (Reduced at higher temp.).
<b>Thinner/Cleaner</b>	Jotun Thinner No. 10 Airless spray: Should not be thinned. Conventional spray: 5 - 10% thinning is recommended. Roller application: 5% thinning is recommended to provide better flow and air release.
<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>	0.33-0.46 mm (0.013-0.018").
<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>23°C</b>	<b>40°C</b>
<b>Surface dry</b>	4 h	4 h	1,5 h	1 h
<b>Through dry</b>	12 h	8 h	2 h	2 h
<b>Cured</b>	21 d	14 d	7 d	4 d
<b>Dry to recoat, minimum</b>	12 h	8 h	2 h	2 h
<b>Dry to recoat, maximum <sup>1</sup></b>				

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.

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## Typical paint system

Jotamastic 87	2 x 150 µm	(Dry Film Thickness)
Any polyurethane TC	1 x 50 µm	(Dry Film Thickness)
<b>Hardtop AS Clear</b>	<b>1 x 25 µm</b>	<b>(Dry Film Thickness)</b>

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

16 litre unit: 12 litres Comp. A (base) in a 20 litre container and 4 litres Hardtop AS/HB, 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 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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