Technical Data Sheet

Hardtop Smart Pack

Product description

This is a two component chemically curing modified acrylic coating. The product does not contain isocyanates, neither does it generate di-isocyanates during hotwork / welding or fire. It has a glossy finish with good gloss retention. It can be used direct to metal. 1:1 mixing ratio for easy use and reduced wastage. Specially designed for application with brush and roller.

Typical use

Ideal as a topcoat over an epoxy primer where a durable, high gloss finish is required for aggressive atmospheric exposure. May also be used as a direct to metal maintenance coating in corrosivity categories up to C3 (ISO 12944-2).

Approvals and certificates

When used as part of an approved scheme, this material has the following certification:
- Low Flame Spread in accordance with EU Directive for Marine Equipment. Approved in accordance with parts 5 and 2 of Annex 1 of IMO 2010 FTP Code, or Parts 5 and 2 of Annex 1 of IMO FTPC when in compliance with IMO 2010 FTP Code Ch. 8

Consult your Jotun representative for details.

Additional certificates and approvals may be available on request.

Colours

according to colour card and Multicolor Industry tinting system (MCI)

Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	58 ± 2 %
Gloss level (GU 60 °)	ISO 2813	gloss (70-85)
Flash point	ISO 3679 Method 1	28 °C
Density	calculated	1.3 kg/l

Region	Regulation	Test Standard	VOC Value
US	CARB(SCM)2020 / SCAQMD rule 1113	Calculated	383 g/l
Hong Kong	Air Pollution Control (VOC) Regulation	Calculated	383 g/l
EU	European Paint Directive 2004/42/CE	Calculated	383 g/l
EU IED	Industrial Emission Directive 2010/75/EU	Calculated	383 g/l
Korea	Korea Clean Air Conservation Act	KS M ISO 11890-1	380 g/l
China	GB 30981-2020 Limit of harmful substances of industrial protective coatings	GB/T 23985-2009 8.3	355 g/l

This Technical Data Sheet supersedes those previously issued.

The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) and the Application Guide (AG) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com

The provided data is typical for factory produced products, subject to slight variation depending on colour.

Gloss description: According to Jotun Performance Coatings' definition.

Film thickness per coat

Typical recommended specification range

Dry film thickness	60	-	150	µm
Wet film thickness	100	-	200	µm
Theoretical spreading rate	9.7	-	3.8	m²/l

Bright colours may need film thickness in the high end of the recommended specification range to achieve opacity.

Surface preparation

Surface preparation summary table

Substrate	Surface preparation	
	Minimum	Recommended
Coated surfaces	Clean, dry and undamaged compatible coating	Clean, dry and undamaged compatible coating
Carbon steel	St 2 (ISO 8501-1)	Sa 2½ (ISO 8501-1)

Application

Application methods

The product can be applied by

Spray:	Airless spray may be used.
Brush:	Use a round brush. Care must be taken to achieve the specified dry film thickness.
Roller:	Use of a foam roller will provide the best finish results.

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Product mixing ratio (by volume)

Hardtop Smart Pack Comp A	1 part(s)
Hardtop Smart Pack Comp B	1 part(s)

Component A to be separately mixed to a homogenous material. A flat spatula or flat, wooden stick might be suitable as mixing tools. Mix thoroughly the total blend (comp A + comp B) until a homogeneous body is obtained, including all material on the wall of the container.

Thinner/Cleaning solvent

Thinner: Jotun Thinner No. 17

Drying and Curing time

Substrate temperature	5 °C	10 °C	23 °C	40 °C
Surface (touch) dry	6 h	4 h	2.5 h	2 h
Walk-on-dry	25 h	20 h	10 h	5 h
Dry to over coat, minimum	25 h	20 h	10 h	5 h
Dried/cured for service	28 d	14 d	12 d	3 d

For maximum overcoating intervals, refer to the Application Guide (AG) for this product.

Drying and curing times are determined under controlled temperatures and relative humidity below 85 %, and at average of the DFT range for the product.

Surface (touch) dry: The state of drying when slight pressure with a finger does not leave an imprint or reveal tackiness.

Walk-on-dry: Minimum time before the coating can tolerate normal foot traffic without permanent marks, imprints or other physical damage.

Dry to over coat, minimum: The recommended shortest time before the next coat can be applied.

Dried/cured for service: Minimum time before the coating can be permanently exposed to the intended environment/medium.

Induction time and Pot life

Paint temperature	23 °C
Pot life	4 h

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Heat resistance

	Temperature	
	Continuous	**Peak**
Dry, atmospheric	120 °C	140 °C

Peak temperature duration max. 1 hour.

The temperatures listed relate to retention of protective properties. Aesthetic properties may suffer at these temperatures.

Product compatibility

Depending on the actual exposure of the coating system, various primers and topcoats can be used in combination with this product. Some examples are shown below. Contact Jotun for specific system recommendation.

Previous coat: epoxy mastic, zinc epoxy, epoxy, shop primer, polyurethane, one component acrylic

Packaging (typical)

	Volume (litres)	**Size of containers (litres)**
Hardtop Smart Pack Comp A	5	5
Hardtop Smart Pack Comp B	5	5

The volume stated is for factory made colours. Note that local variants in pack size and filled volumes can vary due to local regulations.

Storage

The product must be stored in accordance with national regulations. Keep the containers in a dry, shaded, cool, well-ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

Shelf life at 23 °C

Hardtop Smart Pack Comp A	48 month(s)
Hardtop Smart Pack Comp B	48 month(s)

In some markets commercial shelf life can be dictated shorter by local legislation. The above is minimum shelf life, thereafter the paint quality is subject to re-inspection.

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Caution

This product is for professional use only. The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to Jotun's technical documentation. Applicators and operators shall use appropriate personal protection equipment when using this product. This guideline is given based on the current knowledge of the product. Any suggested deviation to suit the site conditions shall be forwarded to the responsible Jotun representative for approval before commencing the work.

Health and safety

Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not inhale spray 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.

Colour variation

When applicable, products primarily meant for use as primers or antifoulings may have slight colour variations from batch to batch. Such products and epoxy based products used as a finish coat may chalk when exposed to sunlight and weathering.

Colour and gloss retention on topcoats/finish coats may vary depending on type of colour, exposure environment such as temperature, UV intensity etc., application quality and generic type of paint. Contact your local Jotun office for further information.

Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.

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