

Hardtop F15 HS Alu

Product description

This is a two component chemically curing fluoro polymer coating. It has an aluminium sheen finish with excellent gloss retention. It is an aluminium pigmented product. To be used as topcoat in atmospheric environments.

Typical use

Protective:

Recommended for refineries, power plants, bridges and buildings. Suitable for a wide range of industrial structures.

Colours

RAL 9006, RAL 9007

Variations depending on differences in application methods, DFT, temperature, humidity and substrate must be expected.

Technology limitations make exact colour match of metallic finishes not possible.

Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	54 ± 2 %
Gloss level (GU 60 °)	ISO 2813	semi gloss (35-70)
Flash point	ISO 3679 Method 1	27 °C
Density	calculated	1.1 kg/l

Region	Regulation	Test Standard	VOC Value
US	CARB(SCM)2020 / SCAQMD rule 1113	Calculated	411 g/l
Hong Kong	Air Pollution Control (VOC) Regulation	Calculated	411 g/l
EU	European Paint Directive 2004/42/CE	Calculated	411 g/l
EU IED	Industrial Emission Directive 2010/75/EU	Calculated	411 g/l
Korea	Korea Clean Air Conservation Act	Calculated	411 g/l
China	GB 30981-2020 Limit of harmful substances of industrial protective coatings	GB/T 23985-2009 8.3	383 g/l

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	30 - 60	µm
Wet film thickness	55 - 110	µm
Theoretical spreading rate	18 - 9	m ² /l

Light colored primers will improve the visual effect of the aluminium shade. Be aware that hiding power may vary with film thickness.

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

Application

Application methods

The product can be applied by

Spray:	Use air spray, airless spray or air-assist spray.
Brush:	Not recommended
Roller:	Not recommended

Varying metallic effects may occur with different application methods or techniques. More details should refer to Application guide or other document files from Jotun.

Product mixing ratio (by volume)

Hardtop F15 HS Alu Comp A	7 part(s)
Hardtop F10/F15/F20 HS Comp B	1 part(s)

The coating shall be mixed with mechanical mixing tool that is clean and fit for purpose. Thoroughly mix the Comp A using the mixer before adding any comp B or thinners. Add the comp B and thoroughly mix the Comp A and the Comp B using the mixer before adding any thinners.

Thinner/Cleaning solvent

Thinner: Jotun Thinner No. 26

Different thinning ratio may get different color, and too high thinning ratio may affect the uniformity.

Guiding data for airless spray

Nozzle tip (inch/1000): 11-15
Pressure at nozzle (minimum): 150 bar/2100 psi
Refer to the Application Guide (AG) for additional information.

Guiding data for air spray

Nozzle tip: 13-15 (inch/1000) / Pressure pot: 1.3-1.5 (mm)
Pressure at nozzle (minimum): 2.1 bar/30 psi / Pressure pot: 2.1 bar/30 psi

Deviation in nozzle pressure or thinning ratio may affect the aluminium orientation and brightness.

Drying and Curing time

Substrate temperature	5 °C	10 °C	23 °C	40 °C
Surface (touch) dry	2 h	1 h	30 min	20 min
Walk-on-dry	40 h	20 h	10 h	5 h
Dry to over coat, minimum	32 h	16 h	8 h	4 h
Dried/cured for service	20 d	15 d	7 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	5 h

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, epoxy mastic, polyurethane

Subsequent coat: fluoro polymer

Packaging (typical)

	Volume (litres)	Size of containers (litres)
Hardtop F15 HS Alu Comp A	12.6	20
Hardtop F10/F15/F20 HS Comp B	1.8	3

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 F15 HS Alu Comp A	48 month(s)
Hardtop F10/F15/F20 HS 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.

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 antifouling 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.