

Jotatop BC LEP

Product description

This is a two component chemically curing aliphatic polyurethane coating. It is an abrasion resistant high solids product. It has excellent rain erosion resistance, weatherability and elasticity. To be used as a topcoat for leading edge areas of wind turbine blades. Developed for use on glass fiber reinforced epoxy and/or polyester substrates, as well as other wind turbine coatings such as Jotatop BC 100 and Jotatop BC 800. This product should be used as the last coat in a system.

Typical use

Specially designed for protection of the leading edge of wind turbine rotor blades.

Approvals and certificates

Rain erosion tested according to ASTM G73-10

Additional certificates and approvals may be available on request.

Colours

white, RAL 7035, RAL 9010

Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	70 ± 2 %
Solids by weight	calculated	79 ± 2 %
Gloss level (GU 60 °)	ISO 2813	matt (0-35)
Flash point	ISO 3679 Method 1	49 °C
Density	calculated	1.1 kg/l

Region	Regulation	Test Standard	VOC Value
US	CARB(SCM)2020 / SCAQMD rule 1113	Calculated	241 g/l
Hong Kong	Air Pollution Control (VOC) Regulation	Calculated	241 g/l
EU	European Paint Directive 2004/42/CE	Calculated	241 g/l
EU IED	Industrial Emission Directive 2010/75/EU	Calculated	241 g/l
Korea	Korea Clean Air Conservation Act	Calculated	241 g/l
China	GB 30981-2020 Limit of harmful substances of industrial protective coatings	GB/T 23985-2009 8.3	220 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	70 - 125	µm
Wet film thickness	100 - 175	µm
Theoretical spreading rate	10 - 5.6	m ² /l

Application of coats thicker than the maximum film thickness is strongly discouraged.

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
Composite	Composites must be fully cured before initiating the surface preparation. The surface shall be hand or machine abraded with non-metallic abrasives or bonded fibre machine or medium to fine abrasive paper with grit P80-P120 to impart a scratch pattern to the surface.	Composites must be fully cured before initiating the surface preparation. The surface shall be hand or machine abraded with non-metallic abrasives or bonded fibre machine or medium to fine abrasive paper with grit P80-P120 to impart a scratch pattern to the surface.

Application

Application methods

The product can be applied by

Spray:	Use air spray or airless spray.
Brush:	Highly recommended.
Roller:	Recommended. Use short hair or flocked foam roller to achieve good leveling performance, and reduce orange peel on the surface.

Product mixing ratio (by volume)

Jotatop BC LEP Comp A	2.2 part(s)
Jotatop BC LEP Comp B	1 part(s)

Product mixing ratio (by weight)

Jotatop BC LEP Comp A	10 part(s)
Jotatop BC LEP Comp B	4.5 part(s)

Thinner/Cleaning solvent

Thinner: Jotun Thinner No. 26

Guiding data for airless spray

Nozzle tip (inch/1000):	13-19
Pressure at nozzle (minimum):	150 bar / 2100 psi

Drying and Curing time

Substrate temperature	10 °C	23 °C	40 °C
Surface (touch) dry	16 h	5 h	1 h
Dry to handle	27 h	7 h	3 h
Dried/cured for service	10 d	5 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 80 %, and at average of the DFT range for the product.

Note: If overcoating interval exceeds dry to handle time, sanding is required prior to re-coating.

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

Dry to handle: Minimum time before the coated objects can be handled without physical damage.

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	30 min

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: polyurethane

Packaging (typical)

	Weight	Size of containers (litres)
Jotatop BC LEP Comp A	11.2 / 2.2 kg	20 / 5
Jotatop BC LEP Comp B	5 / 1 kg	5 / 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

Jotatop BC LEP Comp A	24 month(s)
Jotatop BC LEP Comp B	24 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 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.
