Baltoflake Ecolife TU

Product description

This is a styrene free glass flake reinforced unsaturated polyester coating. It is an ultra high build, extremely abrasion resistant and fast curing barrier coating. Developed specifically as an easy to apply, touch up product for small scale repair work. Can be used as a primer or finish coat in atmospheric and immersed environment. Suitable for properly prepared carbon steel and application over Baltoflake or Baltoflake Ecolife.

Typical use

Recommended for small-scale, on-site repairs of assets coated with Baltoflake or Baltoflake Ecolife. Recommended for areas subject to extreme mechanical wear and harsh exposure conditions. Recommended for offshore environments, including splash zones, jetties, piles, tidal zones, decks, battery rooms, power stations, exterior of buried tanks, concrete bunds, refineries, bridges, mining equipment and general structural steel where future maintenance is challenging.

Colours

selected range of colours

Product data

Property	Test/Standard	Description
Solids by volume	calculated	98 ± 2 %
Gloss level (GU 60 °)	ISO 2813	matt (0-35)
Flash point	ISO 3679 Method 1	53 °C
Density	calculated	1.2 kg/l
VOC-US/Hong Kong	US EPA method 24 (tested) (CARB(SCM)2007, SCAQMD rule 1113, Hong Kong)	81 g/l
VOC-EU	IED (2010/75/EU) (theoretical)	5 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	600	-	1500	µm
Wet film thickness	650	-	1610	µm
Theoretical spreading rate	1.6	-	0.6	m²/l

All vinyl ester and polyester resin systems are subject to some shrinkage during the curing process. This results in a practical spreading rate lower than the theoretically calculated. The shrinkage depends on actual dry film thickness applied and conditions during application.

Surface preparation

To secure lasting adhesion to the substrate all surfaces shall be clean, dry and free from any contamination

Surface preparation summary table

Substrate	Surface preparation	
	Minimum	Recommended
Carbon steel	St 3 (ISO 8501-1) with a surface roughness of minimum 50µm	Sa 2½ (ISO 8501-1) with a surface profile Medium to Coarse G (ISO 8503-2)
Coated surfaces	Bristle blasting, sweep blasting or sanding on compatible coating surface, with a surface roughness of minimum 50µm to impart a scratch pattern to the surface	Bristle blasting, sweep blasting or sanding on compatible coating surface, with a surface roughness of minimum 50µm to impart a scratch pattern to the surface

Application

Application methods

The product can be applied by

Brush:	Recommended for small areas. Care must be taken to achieve the specified dry film thickness.
Trowel:	Recommended application method.

Recommended application method:
Trowel, pallet knife or other suitable dispenser.
Brush

Product mixing

Mixing ratio is fixed as 2.25vol% due to fixed package size. Mix the two components thoroughly by trowel/ spatula until an even colour and appearance. Mix for minimum 1 minute.

Thinner/Cleaning solvent

Cleaning solvent: Jotun Thinner No. 17 / Jotun Thinner No. 27

When thinners are used as a cleaning solvent, the use must be in accordance with prevailing local regulations.

Drying and Curing time

Substrate temperature	5 °C	10 °C	15 °C	23 °C	40 °C
Surface (touch) dry	4 h	3 h	2.5 h	2 h	45 min
Walk-on-dry	4 h	3 h	2.5 h	2 h	45 min
Dry to over coat, minimum	4 h	3 h	2.5 h	2 h	45 min
Dried/cured for service	3 d	2 d	2 d	12 h	4 h

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

If applied in two coats, it is recommended to apply the second coat as soon as possible after Dry to overcoat, and within the maximum overcoating time of 16 hrs. If overcoating time is exceeded, sanding is recommended to ensure optimum adhesion between the coats.

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.

Paint temperature	23 °C
Pot life	15-20 min

Higher temperature will reduce the pot life.

Be aware that the curing of Baltoflake Ecolife TU when mixed with the peroxide, develops heat in an exothermic reaction. If significant volume of mixed paint is left in the can the temperature will increase at the end of the potlife, which can be reduced by filling water into the can after gelling.

Heat resistance

	Temperature	
	Continuous	Peak
Dry, atmospheric	90 °C	100 °C
Immersed, sea water	50 °C	50 °C

Peak temperature duration max. 1 hour.

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

Note that the coating will be resistant to various immersion temperatures depending on the specific chemical and whether immersion is constant or intermittent. Heat resistance is influenced by the total coating system. If used as part of a system, ensure all coatings in the system have similar heat resistance.

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: unsaturated polyester

Packaging (typical)

	Volume (litres)	Size of containers (litres)
Baltoflake Ecolife TU	0.25	0.5

Jotun Peroxide 13 Volume (litres): 0.006
Size of containers (litres): 0.010

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, cool, well ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

Storage temperature not to exceed 25 °C.

Shelf life at 23 °C

Baltoflake Ecolife TU 6 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.