

Penguard Axcelerate

Product description

This is a two component polyamine cured pure epoxy coating. It is a fast drying, high solids, high build product. To be used in combination with Hardtop Axcelerate where fast drying coating systems are required. It provides excellent corrosion protection as part of a complete coating system. Can be used as primer or mid coat in atmospheric environments. Suitable for properly prepared aluminium, carbon steel, galvanised steel and shop primed steel substrates.

Typical use

Recommended for a wide range of applications where speed in the application phase is important.

Colours

red, grey, grey XO, RAL 9010

Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	73 ± 2 %
Gloss level (GU 60 °)	ISO 2813	matt (0-35)
Flash point	ISO 3679 Method 1	32 °C
Density	calculated	1.4 kg/l
VOC-US/Hong Kong	US EPA method 24 (tested) (CARB(SCM)2007, SCAQMD rule 1113, Hong Kong)	246 g/l
VOC-EU	IED (2010/75/EU) (theoretical)	248 g/l

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

All data is valid for mixed paint.

Gloss description: According to Jotun Performance Coatings' definition.

Gloss level may vary slightly with colour, application method, film thickness and with environmental conditions during application and drying/curing.

Film thickness per coat

Typical recommended specification range

Dry film thickness	110 - 250 μm
Wet film thickness	150 - 340 μm
Theoretical spreading rate	6.7 - 3 m ² /l

Surface preparation

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

Surface preparation summary table

Substrate	Surface preparation	
	Minimum	Recommended
Aluminium	The surface shall be hand or machine abraded with non-metallic abrasives or bonded fibre machine or hand abrasive pads to impart a scratch pattern to the surface.	Abrasive blast cleaning to achieve a surface profile using non-metallic abrasive media which is suitable to achieve a sharp and angular surface profile.
Carbon steel	St 2 (ISO 8501-1)	Sa 2½ (ISO 8501-1)
Galvanised steel	The surface shall be clean, dry and appear with a rough and dull profile.	Sweep blast-cleaning using non-metallic abrasive leaving a clean, rough and even pattern.
Shop primed steel	Dry, clean and intact shop primer.	Sweep blasted or alternatively blasted to Sa 2 (ISO 8501-1) of at least 70 % of the surface.

Application

Application methods

The product can be applied by

- Spray: Use airless spray or air-assisted airless spray.
- Brush: Recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.
- Roller: May be used for small areas but is not recommended for first primer coat. However, when using roller application care must be taken to apply sufficient material in order to achieve the specified dry film thickness.

Product mixing ratio (by volume)

Penguard Axcelerate Comp A	3 part(s)
Penguard Axcelerate Comp B	1 part(s)

Thinner/Cleaning solvent

Thinner: Jotun Thinner No. 17

Guiding data for airless spray

Nozzle tip (inch/1000): 17-23
Pressure at nozzle (minimum): 150 bar/2100 psi

Drying and Curing time

Substrate temperature	5 °C	10 °C	15 °C	23 °C	40 °C
Surface (touch) dry	7 h	5 h	3 h	2 h	1 h
Walk-on-dry	14 h	10 h	7 h	5 h	2 h
Dry to over coat, minimum	10 h	7 h	3 h	1.5 h	0.5 h

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

Dried/cured for service: Follow the values found in the TDS and Application Guide (AG) for Hardtop Axcelerate.

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

At 40 °C this product must be recoated with Hardtop Axcelerate between 30 minutes to 1.5 hours after application, or between 4-32 hours after application.

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.

Induction time and Pot life

Paint temperature	23 °C
Pot life	45 min

Heat resistance

	Temperature	
	Continuous	Peak
Dry, atmospheric	90 °C	120 °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: Penguard Axcelerate, zinc rich primers, zinc epoxy
Subsequent coat: Hardtop Axcelerate

Packaging (typical)

	Volume (litres)	Size of containers (litres)
Penguard Axcelerate Comp A	15	20
Penguard Axcelerate 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, 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

Penguard Axcelerate Comp A	24 month(s)
Penguard Axcelerate 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 may fade and 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., and application quality. 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.
