

# Technical Data

## Penguard Special B10



### Product description

This is a two component polyamide cured high molecular weight epoxy coating. It is a highly pigmented zinc phosphate coating. Can be used as primer as part of a complete system in atmospheric environments. Suitable for properly prepared carbon steel, stainless steel, aluminium, galvanised steel and thermally sprayed zinc/aluminium substrates.

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### Recommended use

Approved to meet the requirements of UK Highway Agency Item 110 for use on bridges and highway infrastructure.

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### Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry ( $\mu\text{m}$ )	25	80	30
Film thickness, wet ( $\mu\text{m}$ )	50	160	60
Theoretical spreading rate ( $\text{m}^2/\text{l}$ )	20	6	17

### Comments

For DFTs below 30  $\mu\text{m}$  the product may have to be thinned.

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### Physical properties

Colour	Red
Solids (vol %)*	51 $\pm$ 5
Flash point	25°C $\pm$ 2 (Setaflash)
VOC	3,7 lbs/gal (444 gms/ltr) USA-EPA Method 24
Gloss	Flat
Water resistance	Very good
Abrasion resistance	Very good
Flexibility	Good

\*Measured according to ISO 3233:1998 (E)

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## Surface preparation

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504.

### Bare steel

Cleanliness: Blast cleaning to Sa 2½ (ISO 8501-1:2007). Roughness: using abrasives suitable to achieve grade Fine to Medium G (30-85 µm, Ry5) (ISO 8503-2)

### Shopprimed steel

Clean, dry and undamaged approved shopprimer.

### Coated surfaces

Clean, dry and undamaged compatible primer. Contact your local Jotun office for more information.

### Other surfaces

For aluminium and galvanized surface; degreasing, light abrading or sand sweeping.

The coating may be used on other substrates. Please contact your local Jotun office for more information.

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## Condition during application

The temperature of the substrate should be minimum 0°C and at least 3°C above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. Good ventilation is usually required in confined areas to ensure proper drying.

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## Application methods

<b>Spray</b>	Use airless spray
<b>Brush</b>	Recommended for stripe coating and small areas, care must be taken to achieve the specified dry film thickness.

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## Application data

<b>Mixing ratio (volume)</b>	5:1
<b>Mixing</b>	5 parts Comp. A (base) to be mixed thoroughly with 1 part Penguard Special B10, Comp. B (curing agent).
<b>Thinner/Cleaner</b>	Jotun Thinner No. 17
<b>Guiding data airless spray</b>	
<b>Pressure at nozzle</b>	15 MPa (150 kp/cm <sup>2</sup> , 2100 psi)
<b>Nozzle tip</b>	0.46-0.69 mm (0.018-0.027")
<b>Spray angle</b>	40-80°
<b>Filter</b>	Check to ensure that filters are clean.

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## Drying time

Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with:

- \* Good ventilation (Outdoor exposure or free circulation of air)
- \* Typical film thickness
- \* One coat on top of inert substrate

Substrate temperature	0°C	5°C	10°C	23°C	40°C
Surface dry	6 h	5 h	5 h	1,5 h	0,75 h
Through dry	35 h	20 h	15 h	3,5 h	2 h
Cured		14 d	14 d	7 d	3 d
Dry to recoat, minimum	35 h	16 h	16 h	8 h	3 h
Dry to recoat, maximum <sup>1</sup>					

1. Provided the surface is free from chalking and other contamination prior to application, there is normally no overcoating time limit. If the coating has been exposed to direct sunlight for some time, special attention must be paid to surface cleaning and mattening/removal of the surface layer in order to obtain good adhesion.

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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## Typical paint system

Penguard Special B10	1 x 25 µm	(Dry Film Thickness)
Penguard Pro GF	1 x 450 µm	(Dry Film Thickness)
Hardtop XP	1 x 150 µm	(Dry Film Thickness)

Other systems may be specified, depending on area of use

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## Storage

The product must be stored in accordance with national regulations. Storage conditions are to keep the containers in a dry, cool, well ventilated space and away from source of heat and ignition. Containers must be kept tightly closed.

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## Handling

Handle with care. Stir well before use.

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## Packing size

20 litre unit: 16.7 litres Comp. A (base) in a 20 litre container and 3.3 litres Penguard Special B10, Comp. B (curing agent) in a 5 litre container

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## Health and safety

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

**For detailed information on the health and safety hazards and precautions for use of this product, we refer to the Material Safety Data Sheet.**

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**DISCLAIMER**

The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product can be used under conditions beyond our control, we can only guarantee the quality of the product itself. We also reserve the right to change the given data without notice. Minor product variations may be implemented in order to comply with local requirements.

If there is any inconsistency in the text the English (UK) version will prevail.

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