

Technical Data

Penguard Topcoat



Product description

Penguard Topcoat is a two-pack epoxy topcoat based on a polyamide cured epoxy resin. This product is a part of a complete system which is certified not to spread surface flames. Penguard Topcoat bases are intermediates and need to be processed before use.

Recommended use

As finishing coat in epoxy systems. Also on concrete where epoxy paints are specified.

Film thickness and spreading rate

| | Minimum | Maximum | Typical |
|--|---------|---------|---------|
| Film thickness, dry (μm) | 40 | 60 | 50 |
| Film thickness, wet (μm) | 80 | 120 | 100 |
| Theoretical spreading rate (m^2/l) | 12,5 | 8,3 | 10 |

Approvals

APAS approved to specification 2919.

Physical properties

| | |
|---------------------|--|
| Colour | According to colour card and Multicolor tinting system (MCI) |
| Solids (vol %)* | 50 \pm 2 |
| Flash point | 25°C \pm 2 (Setaflash) |
| VOC | 410 gms/ltr UK-PG6/23(97). Appendix 3 |
| Gloss | Glossy |
| Gloss retention | Fair |
| Water resistance | Very good |
| Abrasion resistance | Very good |
| Solvent resistance | Excellent |
| Chemical resistance | Excellent |
| Flexibility | Good |

*Measured according to ISO 3233:1998 (E)

Surface preparation

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

Coated surfaces

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

Other surfaces

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

Condition during application

The temperature of the substrate should be minimum 10°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. The moisture content in the concrete should not exceed 4 % (by weight). The coating should not be exposed to oil, chemicals or mechanical stress until fully cured.

Application methods

Spray Use 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. However when using roller application care must be taken to apply sufficient material in order to achieve the specified dry film thickness.

Application data

Mixing ratio (volume) 4:1

Mixing 4 parts Comp. A (base) to be mixed thoroughly with 1 part Penguard, Comp. B (curing agent).

Induction time 30 minutes.

Pot life (23°C) 8 hours. (Reduced at higher temp.)

Thinner/Cleaner Jotun Thinner No. 17. Do not use thinner when applied in potable water tanks.

Guiding data airless spray

Pressure at nozzle 15 MPa (150 kp/cm², 2100 psi)

Nozzle tip 0.46 - 0.58 mm (0.018-0.023")

Spray angle 40 - 80°

Filter Check to ensure that filters are clean.

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

Normal hardener

| Substrate temperature | 10°C | 23°C | 40°C |
|-------------------------------------|-------|-------|-------|
| Surface dry | 2,5 h | 1,5 h | 0,5 h |
| Through dry | 14 h | 6,5 h | 3 h |
| Cured | 14 d | 7 d | 3 d |
| Dry to recoat, minimum | 14 h | 7 h | 3 h |
| Dry to recoat, maximum ¹ | | | |

1. The surface should be free from chalking and contamination prior to application. Best intercoat adhesion occurs when the subsequent coat is applied before the preceding coat is cured. If this is exceeded it may be necessary to roughen the surface.

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.

Typical paint system

| | | |
|--------------------|------------|----------------------|
| Jotacote Universal | 2 x 125 µm | (Dry Film Thickness) |
| Penguard Topcoat | 1 x 50 µm | (Dry Film Thickness) |

or

| | | |
|------------------|------------|----------------------|
| Barrier | 1 x 40 µm | (Dry Film Thickness) |
| Penguard Express | 1 x 150 µm | (Dry Film Thickness) |
| Penguard Topcoat | 1 x 50 µm | (Dry Film Thickness) |

Note: To obtain full coverage an extra coat may be necessary, especially for signal colours in red, orange and yellow. Other systems may be specified, depending on area of use

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.

Handling

Handle with care. Stir well before use.

Packing size

16 litres Comp. A in a 20 litre container and 4 litres Penguard, Comp. B (curing agent) in a 5 litre container
4 litres Comp. A in a 5 litre container and 1 litre Penguard, Comp. B (curing agent) in a 1 litre container

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.

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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