

Technical Data

Penguard Clear Varnish



Product description

Penguard Clear Varnish is a two-pack transparent epoxy varnish.

Recommended use

Sealer on concrete masonry, normally under Penguard Topcoat or as a dust-binder on concrete.

Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry (μm)	30	50	40
Film thickness, wet (μm)	60	100	80
Theoretical spreading rate (m^2/l)	16,7	10	12,5

Physical properties

Colour	Transparent
Solids (vol %)*	50 \pm 2
Flash point	25°C \pm 2 (Setaflash)
VOC	420 gms/ltr UK-PG6/23(97). Appendix 3
Gloss	Glossy
Water resistance	Very good
Solvent resistance	Excellent
Chemical resistance	Excellent
Flexibility	Good

*Measured according to ISO 3233:1998 (E)

Surface preparation

All concrete damaged by exposure to chemicals, contaminated by any substance or unsound in any way, shall be removed to expose sound concrete.

Other surfaces

Concrete surface preparation by using dust free captive blasting units, grinding equipment, sand blasting or high pressure water jetting is critical to achieving the right surface profile prior to paint application. Contact your local Jotun office for more information.

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 or conventional 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 parts Comp. A (base) to be mixed thoroughly with 1 part Comp. B (curing agent)
Mixing	½ hour prior to use.
Pot life (23°C)	8 hours (reduced at higher temp.)
Thinner/Cleaner	Jotun Thinner No. 17
Guiding data airless spray	
Pressure at nozzle	15 MPa (150 kp/cm ² , 2100 psi)
Nozzle tip	0.33 - 0.46 mm (0.013-0.018")
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

Substrate temperature	10°C	23°C	40°C
Surface dry	2 h	1 h	0,5 h
Through dry	14 h	6,5 h	3 h
Cured	14 d	7 d	3 d
Dry to recoat, minimum	8 h	4 h	1,5 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 has cured.

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

As dust binder:

Penguard Clear Varnish

Penguard Clear Varnish	Nominal	
For transparent finish:		
Penguard Clear Varnish	1 - 2 x 40 µm	(Dry Film Thickness)
For coloured finish:		
Penguard Clear Varnish	1 x 40 µm	(Dry Film Thickness)
Penguard Topcoat	1 - 2 x 50 µm	(Dry Film Thickness)

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

20 litre unit: 16 litres Comp. A (base) in a 20 litre container and 4 litres Comp. B (curing agent) in a 5 litre container
or
5 litre unit: 4 litres Comp. A (base) in a 5 litre container and 1 litre Comp. B (curing agent) in 1 litre container

Packing may vary from country to country according to local requirements.

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 is often used under conditions beyond our control, we cannot guarantee anything but the quality of the product itself. We reserve the right to change the given data without notice.

Jotun is a World Wide company with factories, sales offices and stocks in more than 50 countries. For your nearest local Jotun address please contact the nearest regional office or visit our website at www.jotun.com

ISSUED 6 DECEMBER 2007 BY JOTUN
THIS DATA SHEET SUPERSEDES THOSE PREVIOUSLY ISSUED