



TECHNICAL DATA SHEET

PB-3100

SOLVENT BASED ALIPHATIC POLYUREA BASE COAT

Product Description

PB-3100 is a solvent based, two component, VOC compliant, aliphatic polyurea coating system. It was specifically developed to be used as a fast curing UV stable basecoat where installation downtime is limited. PB-3100 provides superior abrasion, chemical, and UV resistance with a crystal clear glossy finish.

Benefits of using PB-3100

- ◆ Long pot life for easy workability with fast cure for 1 day flake floor systems
- ◆ Excellent UV, crystal clear, non-yellowing and good gloss retention
- ◆ Excellent adhesion to a variety of substrates
- ◆ Excellent chemical and abrasion resistance
- ◆ Easy to mix 1:1 Ratio by volume

Application Areas

- ◆ Protective residential flooring surfaces
- ◆ Industrial shop floors & Maintenance facilities
- ◆ Marine protection for fiberglass, steel, concrete or wood surfaces
- ◆ Aircraft hangers
- ◆ Offshore platforms, secondary containment, cooling towers, bridges
- ◆ Wastewater treatment applications

Packaging and Recommended Thickness

PB-3100 is offered in a medium grey color and the following kit sizes:

- ◆ 2-gallon kit (3.78L resin (A) and 3.78L hardener (B))
- ◆ Bulk packaging and other colors also available upon request

Product Coverage:

Over primer: 200 ft²/gallon @ 8 mils

Surface Preparation

Remove dust, dirt, grease, oil and all other contaminants with proper cleaner/degreaser. Prepare the surface mechanically as per ICRI-CSP2 profile by diamond grinding to ensure removal of laitance, curing agents and sealers. The compressive strength of a newly poured concrete substrate must be at least 25 MPA (3635 psi) after 28 days cure and at least 1.5 MPA (218 psi) tensile strength. Be careful with condensation (within 10 degrees of the dew point).



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Mixing Instructions

Mix only the amount that you need at one time and pour the mixture within 5 minutes. Unused resin and hardener should be left in original containers. Mix exact amounts of both resin and hardener in separate mixing cups. Do not add more hardener than resin, as this will cause the finished coating to remain sticky.

Product Application

Apply PB-3100 using a rubber squeegee & roll to obtain a uniform coating using a fine quality 10mm roller.

Clean equipment with xylene. Once the product has hardened, it may only be removed mechanically.

Product Restrictions

- ◆ Not recommended for application at temperatures below -10 °C / 14 °F or above 30 °C / 86 °F.
- ◆ Ambient humidity of the surroundings should not exceed 85% during application and during curing process.
- ◆ Substrate temperature must be 3 °C (5.5 °F) above measured dew point.
- ◆ Humidity content of substrate must be < 4% at time of application.
- ◆ Do not apply on porous surfaces where a transfer of humidity may occur during the application.
- ◆ Applying this product on a substrate without a moisture barrier may risk delamination due to hydrostatic pressure.
- ◆ Freshly applied product must be protected against moisture, condensation and water for at least 24 hours.

Health and Safety

Components A and B contain toxic and corrosive ingredients. Consult the safety data sheet (S.D.S) for further information.

Technical Properties

Mix Ratio:	By volume: 1-part resin (A) to 1-part hardener (B) By weight: 100g of resin (A) to 102g of hardener (B)
Viscosity:	Mixed: 300-400 cps
Pot Life (202 g):	30 minutes at room temperature



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Physical Properties

Solids by Weight:	85% (+/- 1%)
Shelf Life:	1 year in unopened containers
Foot traffic @ 25° C	4-6 hours
Recommended Full Cure	3 days @ 25°C
Adhesion (concrete-primer)	550 psi (substrate ruptures), ASTM D4541
Abrasion Resistance	30 mg loss, ASTM D4060
Tensile Strength:	6 500 - 7500 psi, ASTM D638
Elongation	100%, ASTM D638
Compression Strength	9500 psi, ASTM D695
	0.2 %, ASTM D570
Water Absorption %	
Hardness, Shore D	75-78
VOC g/L	< 100 g/L

Disclaimer

The information and recommendations contained in this technical data sheet are based on reliable test results according to BDR. The data mentioned are specific to the material indicated. If used in combination with other materials, the results may be different. It is the responsibility of the user to validate the information therein and to test the product before using it. BDR assumes no legal responsibility for the results obtained in such cases. BDR assumes no legal responsibility for any direct, indirect, consequential, economic or any other damages except to replace the product or to reimbursement the purchase price, as set out in the purchase contract.



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