

POLYUREA BASE COAT STANDARD, FAST & SLOW

TECHNICAL DATA SHEET

DESCRIPTION

Polyurea Base Coat is a two-component, 95 % solids, VOC compliant, polyurea hybrid that was developed as a primer/basecoat for a variety of coating systems. It provides outstanding adhesion on a large number of substrates and performs well in a wide range of temperature conditions.

PRIMARY APPLICATIONS

- Aircraft hangar floors
- Automotive shops
- Bathrooms and locker roomss
- Bridge decks and pillars
- Car washes or wash bays
- Industrial shop floors
- Maintenance facilities
- Offshore platforms
- Primer/ Basecoat for use on concrete, wood, and block

Sidewalks and walkways

- Wall coatings over sheetrock, wood and concrete
- Wastewater treatment applications

ADVANTAGES

- Displays moderate cure times with excellent adhesion
- Easy to mix 2:1 ratio
- Emits virtually no odors and can be applied indoors
- Excellent adhesive properties, allowing application on other firm and hard coating, as well as a good bond to the substrate
- Long open times allow for self-leveling capabilities and increased hiding power as well as broadcasts of decorative aggregate
- Long pot life (35 to 45 min) VOC compliant in all 50 states and Canada

TECHNICAL DATA

PACKAGING	3 and 15 gal. (11.4 and 56.8 liters)
COLOR	PART A: Upon request PART B: Light Yellow MIX: Upon request
RECOMMENDED THICKNESS	Polyurea Base Coat - 8 MILS (200 FP/GAL)
SHELF LIFE	12 months in original unopened factory sealed containers. Keep away from extreme cold, heat or moisture. Keep out of direct sunlight and away from fire hazards.
MIX RATIO, BY VOLUME	A:B = 2:1
MIX RATIO, BY WEIGHT	A:B = 100:59

PROPERTIES

@ 77°F (25°C) AND 55% R.H.

- * Times are approximate and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.
- * The indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same mileage.
- * Mechanical properties : Surface Preparation ICRI 310.2R Concrete Surface Profile (CSP 2 and above) Depending on System to be Installed and Condition of Concrete.
- * If moisture or relative humidity exceeds the limits consult Advanced Resins representative

VOC (Volatile Organic Compounds), (VOC Calculated Per ASTM D3960)	< 50 g/l
STANDARD VISCOSITY WHITE BASE, Mixed Polyol and Isocyanate	400 – 600 cps
MIX DENSITY WHITE BASE, Mixed Polyol and Isocyanate	9.4 lbs./gal
POT LIFE, 100 Grams Mass, Pot Life is Reduced by Increases in Mass and Temperature	20 - 25 Minutes
DRY TO TOUCH, TACK FREE TIME	2 – 3 Hours
CURE INFORMATION, RELATIVE HUMIDITY 55% If the relative humidity is higher the cure time will be quicker. If the relative humidity is lower the cure time will be slower.	Dry Time 2 Hours Mar Free 5 Hours Recoat Max 12 Hours Foot Traffic 10 Hours
SHELF LIFE (shipped and stored) at 400°F to 1000°F (4.40°C to 380°C)	1 Year
TENSILE STRENGTH, ASTM D412	3,000 psi
TENSILE ELONGATION, ASTM D412	100%
TEAR RESISTANCE, ASTM D1004	200 psi
ADHESION, ASTM C1583, CONCRETE FAILURE	>400 psi
HARDNESS (SHORE D), ASTM D2240	50 – 55
MOISTURE VAPOR EMISSION RATE, ASTM F1869	3 lbs.
MOISTURE RELATIVE HUMIDITY, ASTM F2170	80% RH

Note: Although testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier or it is not functioning properly and/or concrete is contamination from oils, chemical spills, densifiers, excessive salts or other bond breakers.

SURFACE PREPARATION

Old concrete Concrete surface must be cleaned. Blastrac, sand blasting, diamond grinder w/30 grit or coarse, or water blasting is highly recommended to remove surface contaminants. Any oils and fats must be removed prior to product application. Acid etching may be required (followed by a thorough rinsing) to open the pores of the concrete to accept a primer. Do not apply to wet substrates. Chloride, moisture, and pH levels should be checked prior to application.

New concrete The concrete should be allowed to cure for a minimum of 30 days. Compression resistance of concrete must be at least 25 mpa (3625 lbs./Inch²) after 28 days and traction resistance must be at least 1,5 mpa (218 lbs./Inch²). Blastrac, sand blasting, diamond grinder w/30 grit or coarser or acid etching (followed by a thorough rinsing) is required to remove the surface laitance that appeared during the curing process.

MIXING

Materials should be pre-conditioned to a minimum of 10° C prior to use. Thoroughly mix each component separately. Pour component B into component A using the proper mixing ratio of 2A:1 B by volume. Mix both components for at least 1 minute using a drill at low revolution (300 to 450 rpm) to reduce trapping of air. While mixing, scrape bottom and walls of container at least once to ensure a homogeneous mix. Only prepare quantity that may be applied during pot life of mixture.

APPLICATION

Apply mixed product on the prepared surface tightly (thin film) using a rubber rake and pass a roller to obtain a uniform coating. Avoid creating puddles.

OVERLAPS

Subsequent overlaps must be applied when primer is still wet or tacky. If primer has dried reprime. Porous substrates may require multiple priming.

CLEANING

Clean all tools and materials with appropriate cleaner before the product cures. Wash hands and skin carefully with warm soapy water. Once product has hardened, it may only be removed through mechanical means.

RESTRICTIONS

- Minimum/Maximum temperature of substrate: 10°C / 30°C (50°F / 86°F).
- Maximum relative humidity during application and curing: 85%.
- Substrate temperature must be 3°C (5.5°F) above dew point measured.
- Humidity content of substrate must be < 4 % when coating is applied.
- Do not apply on porous surfaces where a transfer of humidity may occur during application.
- Protect from humidity, condensation and contact with water during the 24 hour initial curing period.

HEALTH AND SAFETY

In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse. For more information, consult the material safety data sheet.

Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation.

Consult the material safety data sheet for further information.

IMPORTANT NOTICE

All statements, recommendations and technical information contained in this document are accurate to the best knowledge of Advanced Resins. The data relates only to the specific material designated herein. It may not be valid if used in combination with any other materials. It is the users' responsibility to verify suitability of this information for their own particular use, and to test this product before use. Advanced Resins assumes no legal responsibility for use upon these data. Advanced Resins assumes no legal responsibility for any direct, indirect, consequential, economic, or any other damage except to replace the product or refund the purchase price as set out in the purchase agreement.