



UREA-DEK 6470

SOLVENT-FREE, POLYUREA-POLYURETHANE WATERPROOFING MEMBRANE

1. PRODUCT

UREA-DEK 6470 is a two-component, liquid-applied hybrid polyurea polyurethane designed for use as a mix-in-the-bucket, but yet rapid-curing, medium hardness monolithic waterproofing membrane.

2. FEATURES

UREA-DEK 6470 has good chemical and water resistance and is often suitable for use in waterproofing assemblies designed for water immersion conditions (with appropriate geotextile reinforcement and cement mortar top coat). The cured membrane possesses the necessary elongation and tensile strength to span hairline substrate cracks.

3. BENEFITS

Solvent Free, Non-Gassing, Rapid Curing
Easy Application by Squeegee, Trowel or Roller
Resilient to Expansion and Contraction of Substrate
High Adhesion, Stress-Relieving, Crack Bridging Membrane
Provides 100% Contact, Eliminates Migratory Water Problems
Designed for Demanding Exterior Applications

4. PRODUCT DESCRIPTION

Composition: UREA-DEK 6470 is a solvent-free, two-component, liquid-applied, rapid curing aromatic polyurea-polyurethane elastomeric membrane containing no coal tar or asphaltic extenders.

Basic Uses: UREA-DEK 6470 is designed for use as a rapid curing, high mil thickness, liquid-applied, high solids elastomeric waterproofing membrane for concrete, plywood, or metallic substrates.

SUGGESTED APPLICATIONS:

- Rapid-curing Elastomeric Membrane on vehicular decks, pedestrian walkways, patios and helipads.
- High performance between slab waterproofing system for podium decks or roof decks.
- Waterproofing under kitchen, laundry, bathroom floors and shower pans.
- Used as a higher hardness underlayment or bedding compound in a multitude of applications.
- Waterproofing as a geotextile fabric reinforced membrane for reflective pools or water features.
- Waterproofing under tile, terrazzo or wood floors.
- Secondary containment base membrane around storage tanks when used with appropriate top coats.

Limitations: Containers that have been opened should be used within several days. Opened pails should be purged with nitrogen prior to resealing lids. UREA-DEK 6470 is not intended for long term exterior exposure without application of a suitable topping or protective layer. When used in an exposed membrane system, an approved UPI Aliphatic Polyurea or Polyurethane top coat should be applied to prevent UV discoloration.

Shelf Life: Twelve (12) months when continuously stored in the original metal pails at a temperature less than 80°F. Six (6) months in plastic pails.

5. INSTALLATION

Surface Preparation: All surfaces to be coated with UREA-DEK 6470 must be free of all contamination including oil, grease, concrete curing compounds, paint and dirt. New concrete surfaces should be shotblasted, sandblasted or mechanically scarified to remove laitance surface imperfections and impurities. (High Pressure-wash with water or power vacuum in order to remove all cleaning contaminants). New concrete should be cured for a minimum of 28 days and should have a minimum of 3000 psi compressive strength. The only permissible concrete curing agents (if used) are of the pure sodium silicate type. Other proposed curing agents will require the prior written approval of UPI.

Priming: A vast majority of application conditions require priming. Use UI-7118 (low VOC solvent based) or UI-7050 (solvent free) epoxy primers and allow primer to dry to a firm tacky condition prior to application of the UREA-DEK 6470 membrane. Apply the primers at the rate of 300-350 square feet per mixed gallon.

6. APPLICATION

6.1. Thorough mixing of Part A with Part B is critical to successful application and should be performed with a slow speed power mixer such as a model KOL mixer with a ½ h.p. motor @ 60 rpm or equivalent mixer equipped with a "Jiffy" type mixing blade. Do not mix at high speeds or use an air-entraining paddle mixer.

6.2. The mixed material has an approximate pot life of 15 to 20 minutes at 70°F; higher temperatures will shorten the pot life.

6.3. Hand mix or machine mix Part A for 2 minutes in its separate container. Pour all of Part B into the container of Part A and mix 2-3 minutes, taking care that the sides and bottom of the mixing pail are scraped.

6.4. After mixing, apply the material as desired. It may be applied by notched squeegee, notched trowel or heavy duty roller.

6.5. The thickness of the applied membrane will vary with specific use requirements. However, an average thickness of 30 mils (approximately 1/32 inch) is recommended. Two gallons of the mixed material applied at a thickness of 30 mils should cover an area of 100 square feet (with no allowance for loss or wastage).

6.6. Application should not commence unless the ambient temperature is 40°F or higher and should not proceed during inclement weather.

6.7. UREA-DEK 6470 may also be spray applied using appropriate two-component urethane dispensing equipment (e.g. Grayco, Binks, etc.).

6.8. UREA-DEK 6470 will attain its initial set within 2 to 3 hours. However, it will remain slightly tacky to the touch.

6.9. If multiple coats of UREA-DEK 6470 are desired and if the first coat is dirty or lost its surface tack solvent wiping is recommended to remove dirt or contamination prior to additional applications. Do not use alcohol or lacquer thinner but an approved urethane-grade solvent such as Xylene. Do not puddle cleaning solvents. Allow the solvent to fully evaporate prior to applying additional coats. Allow prior applications of UREA-DEK 6470 to cure for at least 4 hours, and until firm, before recoating with additional materials.

7. MAINTENANCE

If UREA-DEK 6470 membrane is damaged prior to the placing of the top coat or protective layer, it can be repaired by abrading the surface, wiping with xylene, acetone, or other suitable solvent and recoating with properly mixed UREA-DEK 6470.

8. TECHNICAL SERVICE

Technical assistance is available by contacting:

URETHANE POLYMERS INT'L
10880 Poplar Avenue
Fontana, CA 92337
Phone: 909-357-7200
Fax: 909-357-7215
Email: info@urethanepolymers.com

9. PRECAUTIONS

This product contains isocyanates and low viscosity amine chain extenders. Read the container-warning labels carefully. Exposure to Isocyanates may cause allergic skin and respiratory reaction. Personnel applying isocyanate prepolymers should wear protective clothing, goggles and gloves and should use only with adequate ventilation and respiratory protective gear. Avoid contact of material with skin or eyes and avoid breathing vapors. Mix and apply only in well-ventilated areas. Read the appropriate MSDS sheets prior to handling the epoxy primers or the UREA-DEK 6470 Membrane. THIS PRODUCT IS ONLY FOR PROFESSIONAL USE BY QUALIFIED CONSTRUCTION PROFESSIONALS.

11. PHYSICAL PROPERTIES (TYPICAL)

10. LIMITED WARRANTY

Urethane Polymers International (UPI) warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any UPI materials prove to contain manufacturing defects that substantially affect their performance, UPI will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by UPI with respect to its materials. There are no other warranties, including the implied warranties of merchantability and/or fitness for a particular purpose. UPI specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever.

The dollar value of UPI'S liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the UPI material in question.

UREA-DEK 6470

<i>PROPERTY</i>	<i>TYPICAL VALUE</i>	<i>ASTM TEST METHOD</i>
Color	Tan	
Weight per Gallon Part A (Resin) Part B (Hardener)	9.4 lbs. 8.3 lbs.	
Solvent Content	Solvent Free	Calculated
Coverage, sq. ft. per gal, @ 64 mils thickness	25 (4 gal./sq.)	-----
Hardness, Shore A	73 ± 3	D-2240
Tensile Strength	2000 ± 200 psi	D-412
Ultimate Elongation, %	600 ± 100%	D-412
Tear Resistance	200 ± 25 pli	D-1004
Pot Life, @77°F	10 – 20 minutes	-----
Gel Time, @77°F	25 –30 minutes	-----
Low Temperature Brittleness @ -30°F	Passes	D-746
Flash Point, Mixed Material	Above 200°F (93.9°C)	D-3278
Water Absorption, 1 week @ 77°F	Negligible	-----

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