



## UREA-DEK SYSTEM RC-1

### 1. OVERVIEW & FEATURES

UREA-DEK SYSTEM RC-1 is a multi-purpose, single-component, aliphatic, polyurea liquid adhesive designed to protect and preserve new or aged smooth or mineral roof systems from the damaging effects of UV exposure.

UREA-DEK SYSTEM RC-1, combined with white marble roofing aggregate or white reflective roofing minerals, provides a superior surfacing system that meets the requirements of California's Title 24 Energy Efficiency Standards.

**Energy Efficient**- Provides added UV protection to prolong the life of the roof, greatly reducing thermal shock while helping maintain internal temperatures and reducing cooling costs.

**Waterproofing Protection** - UREA-DEK RC-1 systems will provide 32 wet mils (28 dry mils), without gravel, of additional waterproofing protection to an existing roof system. This process will effectively extend the life of the roof system.

**Adds Tensile Strength to Standard Applications** - UREA-DEK SYSTEM RC-1 offers performance qualities that are greatly superior to conventional asphalt flood coats. The chemical properties of UREA-DEK SYSTEM RC-1 create a tough and durable surface that will increase the life of a roof system.

**User Friendly** - The ease of application makes UREA-DEK SYSTEM RC-1 extremely fast and simple to install. This superior adhesive can be used to protect and restore an entire roofing system. UREA-DEK SYSTEM RC-1 can be applied by spray, roller or squeegee.

### 2. APPLICATION

**Restoration Overview** - Ensure that all wet insulation is removed. An infrared scan is highly recommended. Remove all dirt, dust and debris from the roof surface. Make any necessary repairs, and also verify that all repairs are securely bonded.

Epoxy Primer is required over all new cold process BUR/modified asphalt systems and over existing systems. Apply primer at a rate of 1/2 - 1 gallon per square prior to application of the UREA-DEK RC-1 system.

**Application for Gravel Surfaces** - Spray or roll 2 gallons (32 wet mils) of UREA-DEK RC-1 per 100 sq. ft. (.82 l/m<sup>2</sup>). Then, apply new white gravel into the wet UREA-DEK RC-1.

**Application for Mineral Surfaces** - Spray or roll 2 gallons (32 wet mils) of UREA-DEK RC-1 per 100 sq. ft. (.82 l/m<sup>2</sup>) on all seams. Allow UREA-DEK RC-1 to cure fully, approximately 24 hours. Then apply 2 gallons (32 wet mils) of UREA-DEK RC-1 per 100 sq. ft. (.82 l/m<sup>2</sup>) on roof surface. Finally, broadcast white roofing minerals into wet UREA-DEK RC-1.

**Application Technique for Title 24 Compliant Installations**- To meet Title 24 standards, you must spray or roll 1 gallon per 100 sq. ft. (.41 l/m<sup>2</sup>) then embed 3/8" white gravel into the wet adhesive. If using mineral, first coat the seams and allow to cure before coating with 1 gallon per 100 sq. ft. (.41 l/m<sup>2</sup>) and broadcasting white roofing mineral into the wet adhesive. Wait 24 hours to cure and then spray or roll another 1 gallon per 100 sq. ft. (.41 l/m<sup>2</sup>) of UREA-DEK RC-1 over the surface locking the gravel or mineral into place.

**Coverage** - Apply UREA-DEK RC-1 at a rate of 2 gallons per 100 sq. ft. (.82 l/m<sup>2</sup>). For gravel surfaces, broadcast 200 lbs. per 100 sq. ft. of gravel or 35 lbs. per 100 sq. ft. of roofing mineral. Slopes are restricted to 3:12 maximum. For a Class "A" fire rating, the slopes are restricted to 2:12

maximum.

If UREA-DEK RC-1 is damaged, it can be repaired by removing the gravel and then cleaning the surface with M.E.K. and recoating with UREA-DEK RC-1 and gravel.

### 3. PRECAUTIONS

- Do not apply when temperatures are below 40°F (4.4°C) or if rain is in the forecast within 48 hours. Spray application is not recommended below 50°F (10°C)
- Do not apply over wet surfaces. Please read product label and SDS
- Do not apply UREA-DEK RC-1 at a coverage rate higher than 2 gallons per 100 sq. ft. (.82 l/m<sup>2</sup>) within a 24 hour period. Excessive product can cause air bubbles in the product application.
- Do not apply over BUR/modified coal tar systems.
- Open containers may develop a skin; remove skin and the rest of the material will be useable.

### 4. TECHNICAL DATA

PROPERTY	TYPICAL VALUE
Tensile Strength (ASTM D 412)	2300-2600 psi
Tear Resistance (ASTM D 624)	230-280 lbs./in.
Elongation (ASTM D 412)	250-300%
Density @ 77°F (25°C) (ASTM D 2939)	10.14 lbs./gal. (.984 g/cm <sup>3</sup> )
Flash Point (ASTM D 93)	120°F (48°C) min.
Non-Volatile (ASTM D 75)	Typical 89%
Viscosity @ 77°F (25°C); 20 rpm (ASTM D 2196)	3500-5000 cP
Brookfield RVT, #4 Spindle	
Cure Time (@ 75°F)	24 hours minimum
Coverage	2 gal/100 sq. ft. (.82 l/m <sup>2</sup> )
Shelf Life	1 Year
Wet Film Thickness @ 2 gal. (7.5 l) per square	32 mils (812.8 microns)
Packaging	55 gallon drum (208.2 l) 5 gallon pail (18.9 l)

Eco-Facts	UREA-DEK RC-1 Adhesive	UREA-DEK RC-1 Surfacing System
VOC	130 g/l	130 g/l
Reflectance	0.89	0.72
Emittance	0.89	0.93
SRI	112	89

### 5. TECHNICAL SERVICE

Technical assistance is available by contacting

**URETHANE POLYMERS INTERNATIONAL, INC.**  
10880 Poplar Avenue  
Fontana, California 92337  
Phone: (909) 357-7200  
Fax: (909) 357-7215  
Email: [info@urethanepolymers.com](mailto:info@urethanepolymers.com)

## **6. PRECAUTIONS**

Personnel should wear protective clothing and gloves, avoid contact of material with skin or eyes, and avoid breathing vapors. Mix and apply in well-ventilated areas and observe normal safety precautions. THIS PRODUCT IS FOR PROFESSIONAL USE ONLY.

## **7. LIMITED WARRANTY**

Urethane Polymers International, Inc. (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 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.

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