NUKOTE PROTEC ARU-S

DESCRIPTION:

NUKOTE Protec ARU-S is an aromatic, single component, high solids, environmentally safe, liquid applied, moisture cured, urethane polyurea surface protection coating.

FEATURES:

- Good weatherability
- Solvent free
- Environmentally safe
- Low odor
- Seamless Waterproofing membrane

TYPICAL USES:

- Concrete
- Plywood
- Pedestrian/Vehicular traffic
- Resealing existing urethane surfaces
- Most metal, rubber, wood or masonry surfaces

COLORS:

Available color is Stone Grey, Tan. Custom colors, blended to match any RAL number, are available upon request subject to minimum quantity.

PACKAGING:

55-gallon (208-liter) drum sets, net fill 50 gallons (189 liters) with 1-quart (0.95 liter) can of catalyst

5-gallon (18.9 liter) pail with 8-ounce (0.24 liter) can of catalyst

1-gallon (3.78 liter) can with vial of catalyst

COVERAGE:

Calculation for theoretical coverage: 400 Ft^2 /gal @ 4 mils (10 m^2/liter @ 0.1mm).

STORAGE:

Six months in factory delivered, unopened drums. Store on pallets and keep away from extreme heat, freezing, and moisture. The use of drum heaters is encouraged to reduce material viscosity at low temperatures.

TECHNICAL DATA (All values @ 77 ºF / 25 ºC)	**US**	**Metric**
Solids by volume (ASTM D2697)	99.8%	99.8%
Volatile organic compounds (ASTM D2369)	0.017 lb./gal	2 gm/ lit
Theoretical coverage	400 ft^2/gal @ 4 mils	10m^2/ lit @ 0.1 mm
Specific Gravity of materials (ASTM D792)	10 lbs./gal	1.2 kg/ liter
Viscosity at 158º F/70º C in cps ±10% (ASTM D4878)	1150-1850	1150-1850

Shelf life @ 77 ºF /25 ºC	6 Months	6 Months
Tensile strength (ASTM D412-C)	2060 to 2350 psi	14 to 16 MPa
Elongation (ASTM D412-C)	550-650 %	550-650 %
Hardness (ASTM D2240)	75 to 85 Shore A	75 to 85 Shore A
Tear strength (ASTM D642)	272 to 329 pli	47 to 58 kN/m
PROCESSING PROPERTIES (Under standard lab conditions)		
Mix Ratio V/V	NA	
Gel time	NA	
Dry to recoat (DFT & Temperature dependant)	16-48 hours	
Post cure time	48-72 hours	
Properties and values are highly dependent on equipment, spray gun, mix chamber temperature, pressure and related parameters. Variations are possible and expected.		

MIXING:

Before application, mix Nukote Protec ARU-S using a mechanical mixer (Jiffy mixer) at slow speeds or by hand for at least 5 minutes. Add the catalyst and continue mixing until a homogeneous mixture and color is obtained. Boxing of material is recommended. Use caution not to whip too much air into the material as this may result in pinhole blisters or shortened pot life.

SURFACE PREPARATION:

Concrete:
The surface of a concrete subfloor should be dry, smooth, structurally sound and free of depression, scale, or foreign deposits of any kind. Remove all curing compounds. Abrasive blast, sweep blast or water blast to remove all latent material and expose voids. Use a good quality epoxy filler or mortar for void and spall filling, skim coat or repairs. Prime, fill imperfections in the substrate surface to limit out-gassing. All concrete substrates, on or below grade level should be tested for moisture content. On-grade or below-grade concrete floors or slabs should have a moisture barrier installed to protect from ground moisture. The surface preparation of concrete should meet and conform to Joint NACE 6/SSPC-SP 13 standards and achieve a concrete surface profile of CSP 3 to CSP 6 as per ICRI Guideline No.03732 for optimum performance.

APPLICATION:

For best results use a squeegee or notched trowel. Care should be taken not to cause air bubbles. Apply Nukote Protec ARU-S evenly over the entire surface. Application should be continuous to ensure a smooth and level coat with no lines or streaks to disfigure the deck.

Nukote Protect ARU-S may require more than one coat depending on the job specifications and requirements. When estimating material requirements, coverage rates tend to increase for subsequent coats of material. To obtain proper adhesion between coats it is imperative that recoating be done within 48 hours. When Nukote Protec ARU-S is uses

as a seal coat only, the surface must be clean, dry and primed with Nukote EP Prime II to achieve proper adhesion to the surface.

At 70° F (21° C) and 50% Relative humidity, allow each coat to cure a minimum of 16 hours between each coat. If more than 48 hours passes between coats, re-prime the surface with Nukote EP Prime I or EP Prime II before proceeding. At 70° F (21° C) and 50% Relative humidity, allow 24 – 48 hours before permitting light pedestrian traffic and at least 72- 96 hours before permitting heavy pedestrian or vehicular traffic on the finished surface.
Uncured Nukote Protec ARU-S is very sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application. Low temperatures and/or low humidity extend the cure time. To accelerate cure Nukote hardener may be used.

EQUIPMENT CLEAN UP:

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

LIMITATIONS:

Surface must be dry, clean and free of foreign matter. For ease of application, solvent free materials should be applied in temperatures greater than 60° F (15.5° C). Coated surface may be slippery when wet. Surface will fade, chalk and discolor over time. Do not dilute under any circumstance. Containers that have been opened must be used as soon as possible.

WARNING:

This product contains Isocyanate.

WARRANTIES AND DISCLAIMERS:

Nukote Coating Systems International, a Nevada, USA Corporation warrants that the two components of this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product is dependent upon the proper mixture and application of the components by the applicator. Nukote Coating Systems has no role in the application of the finished polymer other than to manufacture and supply its two components. It is vital that the person applying this product understands the product and is fully trained and certified in the use of plural component equipment and application of plural component materials. There are no warranties that extend beyond the description on the face of this instrument, except when provided in writing, directly by Nukote Coating Systems International and executed under seal by a company officer.