
DESCRIPTION:

Nukote I-Gard is a two component, fast setting, rapid curing and solvent free, very high solids hybrid aliphatic polyurea elastomeric membrane. Nukote I-Gard can be applied to properly prepared interior or exterior concrete, plywood and metal surfaces. It is suitable for single or multiple applications, in temperatures as low as 20 °F (-6 °C) and is insensitive to moisture. Nukote I-Gard can be used as a standalone flooring, roofing product or as a top coat on a flooring system for high traffic pedestrian, vehicular traffic, commercial and industrial floors.

FEATURES:

- Environmentally friendly ,very high solids
- Seamless, resilient, and durable
- Non-Gassing for applying in any thickness
- Tough weather resistant waterproofing system
- Non-skid surface available in many various textures and finishes
- Meets USDA criteria
- Can be applied at any thickness
- Can be applied on green(vented) concrete
- Good chemical resistance
- Good thermal stability
- Exterior and interior applications
- Excellent low temperature flexibility

TYPICAL USES:

- Vehicular traffic decks
- Pedestrian traffic decks
- Balconies, patios, plazas, gymnasium and pool decks
- Food processing areas
- Walkways, roofs
- Concrete , plywood decks
- Primed metal, wood, and masonry Surfaces

COLORS:

Available colors are dolphin grey and tan. Custom colors are also available with minimum order of 250 gallons (945 liters). See color chart for special provisions.

PACKAGING:

4.4 gallon (16.65 liter) set: A pail with 4 gallons (15.15 liters) of Side A and one can with 50 oz. (1.5 liter) of side B.

COVERAGE:

Nukote I-Gard may be applied at any rate to achieve the desired thickness.
Calculation for theoretical coverage: 40 Ft²/gal @ 40 mils (1 m²/liter @ 1mm).

STORAGE:

12 months in factory delivered, unopened drums at 80 °F (25 °C) .Store on pallets and keep away from extreme heat, freezing, and moisture. Opened and partially used material should be used within 7 days.

TECHNICAL DATA (All values @ 77 °F / 25 °C)	US	Metric
Solids by volume	94%	94%
Volatile Organic Compounds	< 0.12 lb./gal	< 15 gm/ liter
Theoretical coverage	38 ft ² /gal/40 mils	0.94 m ² /liter/mm
U.V Stability, Q panel Weather-O-meter (No fading, cracking or crazing or physical damage)	2000 hours	2000 hours
Specific Gravity	A-9.35, B-8 lb./gal	A-1.12, B-0.96 kg/ liter
Adhesive peel Strength on Primed Concrete (ASTM D 903)	35-50 pli	6 - 9 kN/m
Shelf life @ 77 °F / 25 °C	12 Months	12 Months
Tensile strength (ASTM D412-C)	2900 - 3500 psi	20 - 24 MPa
Elongation (ASTM D412-C)	400 -500 %	400 - 500 %
Tear strength (ASTM D642)	55- 70 pli	9.5- 12 kN/m
Hardness (ASTM D2240)	80 - 90 Shore A	80 - 90 Shore A
Moisture Vapor Transmission (ASTM E96)	1.54 perms	1.54 perms
Water absorption -24 hours (ASTM D570)	1.3%	1.3%
Flash point Pensky Martin	>200 °F	>93 °C
PROCESSING PROPERTIES (Under standard lab conditions)		
Mix Ratio (V/V)	10:1	
Pot life	30 minutes	
Recoat time	3- 4 hours	
Maximum over coat time	24 hours	
<i>Properties and values are highly dependent on equipment, spray gun, mix chamber temperature, pressure and related parameters. Variations are possible and expected.</i>		

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 2 to CSP 5 as per ICRI Guideline No: 03732 for optimum performance.

Metal:

All surfaces should be clean and free from contamination. The surface should be assessed and treated in accordance with ISO 8504, Abrasive blast the surface to minimum NACE-2/SSPC SP-10/Sa 2.5, as per ISO 8501-1, for a visual assessment of surface cleanliness with an anchor profile of 2 to 3 mils (50 -75 microns). Soluble salts must be removed to an acceptable levels. *Refer to NCSI surface preparation manual for detailed procedures for different types of substrates.*

MIXING:

Using a mechanical mixer, first pre-mix Side-A material thoroughly to obtain a uniform color, making sure to scrape the solids from the bottom and sides of the pail. Mix for 1-2 minutes. Box the materials to obtain a thorough mix. Use caution not to whip air into the material when using a mechanical mixer, as this may result in pinhole blisters and/or shortened pot life. For a faster application and curing heat Nukote I-Gard to 100° using a 10:1 dispensing unit with a static mixer.

APPLICATION:

Apply Nukote I-Gard evenly, over the entire deck using a 10:1 ratio machine or pour mixed material and spread the material with a squeegee or notched trowel over the entire deck. Apply Nukote I-Gard as a continuous coating to minimize lines and/or streaking. To obtain proper adhesion between coats, spread the dispensed material with squeegee and back roll evenly over the entire deck. Allow each coat to cure (depending on environmental conditions and temperature) a minimum of 2-4 hours and a maximum of 24 hours. If more than 24 hours passes between coats, re-prime the surface with recommended NCSI primer before proceeding. Nukote I-Gard 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 temperature and/or low humidity extend the cure time.

EQUIPMENT CLEAN UP:

Cured product may be disposed of without restriction. Uncured Isocyanate and resin portions should be mixed together and disposed of in accordance with local regulations. Containers should be disposed of according to local environmental laws and ordinances.

LIMITATIONS:

Not suitable in sub grade, or as buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, magnesite, and lightweight concrete. Slight chalking, fading and discoloration may occur over long term exposure. Containers that have been opened must be used as soon as possible. Do not dilute under any circumstance.

WARNING:

This product contains Isocyanate and curatives. Nukote I-Gard Side-B is considered Dangerous Goods. DOT regulations classify it as: **UN 1760, Corrosive Liquid, N.O.S. (Contains Amine), Class 8, PG III.**

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.