
DESCRIPTION:

Nukote I-Gard is a two component, fast setting, rapid curing and solvent free, liquid applied, 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
- Quick cure
- Low odor
- Elastomeric
- Waterproof
- Seamless, resilient
- Non-Gassing
- Tough and durable
- Non-skid surface available in many various textures and finishes
- Meets California VOC and AQMD requirements, including SCAQMD areas
- Can be applied at any thickness
- Good chemical resistance
- Good thermal stability. It will not soften in heat nor embrittle in cold
- Exterior and interior applications
- Installed and maintained properly, will ensure years of service

TYPICAL USES:

- Vehicular traffic decks
- Pedestrian traffic decks
- Mechanical room floors
- Kennels
- Helicopter pads
- Balconies, patios, plazas, gymnasium and pool decks
- Food processing areas
- Walkways, stairs roofs
- Concrete , plywood decks
- Primed metal, wood, and masonry Surfaces

COLORS:

Available colors are dolphin grey and tan. Custom colors are also available.

PACKAGING:

4.4-gallon (16.65 liter) set: A 5-gallon pail with net 4 gallons (15.15 liters) of Side A and one 1/2 gallon jar, net 0.4 gallons (1.5 liter) of side B.

COVERAGE:

Calculation for theoretical coverage: 66 ft²/gal @ 23 mils (1.6 m²/liter @ 0.5mm) in a single application. Dry film thickness per coat is 15 ± 2 mils (380 ± 50 microns)
 It usually should be applied in 3 layers, totally 61 mills DFT.

STORAGE:

12 months in factory delivered, unopened drums at 60-95 °F (15-35 °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 |
| Shelf life @ 77 °F / 25 °C | 12 months | 12 months |
| Tensile strength (ASTM D412-C) | 3200 ± 200 psi | 22 ± 1.5 MPa |
| Elongation (ASTM D412-C) | 450 ± 50 % | 400 - 500 % |
| Tear strength (ASTM D642) | 55- 70 pli | 9.5- 12 kN/m |
| Hardness (ASTM D2240) | 85 ± 5 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% |
| Adhesive peel strength on primed concrete (ASTM D903) | 40 ± 10 pli | 52.6 ± 3.5 kN/m |
| Flash point Pensky Martin | >200 °F | >93 °C |
| PROCESSING PROPERTIES (Under standard lab conditions) | | |
| Mix Ratio (V/V) | 10:1 | |
| Pot life | 30 ± 10 minutes | |
| Recoat time | Min 2- 4 hours (within 8-12 hours) | |

| | |
|--|--------------|
| Maximum over coat time | 24 hours |
| Foot traffic | >16-24 hours |
| Vehicular traffic | >60 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.

Prime all joints, cracks, flashings with Nukote EP Prime II. All cracks, joints, flashings over 1/16" in width must be caulked with a polyurethane sealant, Nukote BG, Premera PolyPatch CB or Premera PolyBond MB. Consult NCSI. Bridge joints, cracks, and flashings with 4" Nukote Joint Tape if needed.

Note: For rough and porous concrete or when outgassing is a concern, use Nukote EP Prime. Allow primer to become tack free before proceeding to the next phase.

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.* Metal should be primed with Nukote Metal Prime I.

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. Add side-B of I-Gard and continue mixing until a homogenous mixture and color is obtained. 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.

APPLICATION:

Nukote I-Gard vehicular deck system utilizes an epoxy primer and one easy to use high tensile, solvent free, hybrid aliphatic polyurea to complete the system. The Nukote I-Gard vehicular deck system is a user-friendly application of a low odor coating that is specifically designed to be tough and durable enough to withstand vehicular traffic. It is an elastomeric system designed to expand and contract with normal structural movements. The three-coat application saves time and labor. Nukote I-Gard vehicular deck system can be applied up to 1.5 gal/100 sq.ft. to protect surfaces against spalling, freeze/thaw damage, and chemicals commonly encountered on vehicular traffic decks.

Prime all joints, cracks, flashings with Nukote EP Prime II. All cracks, joints, flashings over 1/16" in width must be caulked with a polyurethane sealant, Nukote BG, Premera PolyPatch CB or Premera PolyBond MB. Consult NCSI. Bridge joints, cracks, and flashings with 4" Nukote Joint Tape if needed.

Apply Nukote I-Gard evenly at a rate of 1.5 gallons/100 sq.ft (0.62 lit/sq.m), 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.

Apply another coat of Nukote I-Gard at the rate of 1.5 gallon/100 sq.ft (0.62 liter/sq.m) over the entire surface. Immediately broadcast washed, dry, rounded sand, 16-20 mesh (0.0469-0.0331 in.; 1.19-0.841 mm), with 6.5+ Moh's minimum hardness over the entire surface at a rate of 20 lbs./100 sq.ft or as required to achieve a slip-resistant finish. Allow Nukote I-Gard to cure and remove all loose aggregate before proceeding to next phase.

Apply a final coat of Nukote I-Gard at the rate of 1 gallon/100 sq.ft (0.41 liter/sq.m) over the previous coat. Immediately broadcast and backroll washed, dry, rounded sand, 16-20 mesh (0.0469-0.0331 in.; 1.19-0.841 mm), with 6.5+ Moh's minimum hardness over the entire surface at a rate of 20 lbs./100 sq.ft or as required to achieve a slip-resistant finish.

At 75°F (24 °C) and 50% relative humidity, allow each coat to cure a minimum of 2-4 hours. If more than 48 hours passes between coats, re-prime the surface with Premera AE T7 before proceeding.

Allow 16-24 hours before permitting light foot traffic. Keep all vehicular traffic off the finished Nukote I-Gard vehicular deck system for at least 60 hours.

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.

When applied as directed above, the Nukote I-Gard vehicular deck system will provide 61 mils (1550 microns) dry film thickness, exclusive of aggregate, of superior waterproofing protection.

EQUIPMENT CLEAN UP:

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

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 solvent. 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.