NUKOTE IM-129



DESCRIPTION:

Nukote IM-129 is a two component, liquid applied, asphalt extended aromatic polyurethane that adheres to most substrates, to form a waterproof membrane. Nukote IM-129 is ANSI / NSF-61 approved for contact with Potable Water. Nukote IM-129 meets or exceeds requirement of ASTM C-836 for elastomeric waterproofing membrane as well as ASTM C-957 for water proofing membrane with integral wearing course. It can be applied on concrete, steel, wood and asphalt and is suitable for service temperature between -40 ° F and 200 ° F (-40 ° C and 90 ° C)

FEATURES:

- > Seamless resilient, and durable
- > Suitable for interior and exterior waterproofing
- Bridge cracks and joints
- Impervious to water and aqueous chemicals
- VOC compliant
- Proven Protection
- UV stable (color fades)

TYPICAL USES:

- Substrates, storage tanks and pipes in contact with potable water
- Corrosion protection
- Secondary containment
- Roofing and waterproofing
- Pond liners with scrim
- Tank Liner

COLORS:

Black, but it fades to dull black on exposure.

PACKAGING:

1-gallon (3.8-liter) kits, of 0.1 gallon (0.38 liters) side A and 0.9 gallon (3.4 liters) of side B 5-gallon (19-liter) kits, of 0.5 gallon (1.7 liters) side A and 4.5 gallon (17.3 liters) of side B

COVERAGE:

Calculation for theoretical coverage: 720 Ft²/gal @ 40 mils (1.78 m²/liter @ 500 microns).

STORAGE:

Twelve months in factory delivered, unopened drums. Store on pallets and keep away from extreme heat, freezing, and moisture. Opened and partially used material should be used within 7 days.

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 IM-129 to 100 using a 10:1 dispensing unit with a static mixer.



TECHNICAL DATA (All values @ 77 °F / 25 °C)	US	Metric
Solids by volume (ASTM D2697)	89%	89%
Volatile organic compounds (ASTM D2369)	< 225 lb./gal	< 87 gm/ liter
Theoretical coverage	72ft²/gal/20 mils	1.78 m ² /liter/500 microns
Weathering (ASTM D822)	5000 hours	5000 hours
Specific Gravity of materials (ASTM D792)	A-9.35, B-8 lb./gal	A-1.12, B-0.96 kg/ liter
Adhesive peel Strength on Primed Concrete (ASTM D903)	35-50 pli	6 - 9 kN/m
Shelf life @ 77° F / 25° C	12 Months	12 Months
Tensile strength (ASTM D412-C)	850- 1000 psi	6-7 MPa
Elongation (ASTM D412-C)	350 -500 %	350 - 500 %
Tear strength (ASTM D642)	100 - 200 pli	17- 35 kN/m
Hardness (ASTM D2240)	80 - 90 Shore A	80 - 90 Shore A
Water vapor transmission rate (ASTM E96)	0.06 perms	0.06 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	1 to 2 hours	
Maximum over coat time	7 to 8 hours	
Foot traffic	24 hours	
Properties and values are highly dependent on equipment, spray gun, mix chamber temperature, pressure and related parameters. Variations are possible and expected.		

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

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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.*

APPLICATION:

Apply Nukote IM-129 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 IM-129 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 1-2 hours and a maximum of 8 hours. If more than 8 hours passes between coats, abrade, re-prime the surface with recommended NCSI primer before proceeding. Nukote IM-129 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 IM-129 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.