
DESCRIPTION:

Nukote Polyprime II is a two component 1:1 ratio, rapid setting, low temperature curing liquid applied, aromatic polyurethane primer suitable for metal, concrete and masonry substrates. Nukote Polyprime II is easy to apply, sets quickly, and has excellent physical properties. It can also be used for concrete and masonry repair.

FEATURES:

- Very high solids
- Non Toxic
- Rapid cure. Fast back in service
- Odorless
- Good chemical resistance
- Applicable in hot or cold weather. Low temperature curing -10 °F (-12 °C)
- Remains Flexible in Wide Range of Temperatures
- Excellent abrasion resistance

TYPICAL USES:

- Low temperature and rapid cure primer for metal, concrete and masonry
- Repair of hairline. Thin, wide or deep cracks

COLORS:

Side A: Amber

Side B: Gray or Clear

PACKAGING:

2-gallon (7.6-liter) kits, shipped in metal drums of 1 gallons (3.8 liters) each of side A and side B
10-gallon (38-liter) kits, shipped in plastic pails of 5 gallons (19 liters) each of side A and side B

COVERAGE:

Nukote Polyprime II spread rate is 400 ft²/ gal at 4 mils (9.9 m²/liter at 100 microns) thickness without factoring any loss

STORAGE:

Twelve months in factory delivered, unopened drums. Store on pallets and keep away from extreme heat, freezing, and moisture. Store between 60-95 °F (15-35 °C)

MIXING:

Nukote Polyprime II might not be diluted under any circumstance. Polyprime II should be applied using a 1:1 heated proportioning dispensing system. Product should be Pre conditioned to 80 °F (27 °C)

LIMITATIONS:

Do not open until ready to use, and store in a sealed container after opening. Containers that have been opened must be used as soon as possible.

Surfaces must be dry, clean and free of foreign matter.

TECHNICAL DATA (All values @ 77 °F / 25 °C)	US	Metric
Solids by volume (ASTM D2697)	99%	99%
Volatile organic compounds (ASTM D2369)	0.12lb./gal	5 gm/ lit
Theoretical coverage	400 ft²/gal @ 4 mils	10m²/ lit @ 100 microns
Specific Gravity of materials (ASTM D792)	A: 9.21, B: 7.85 lbs./gal	A:1.106, B:0.95kg/ liter
Viscosity at 77 °F /25 °C in cps ±10% (ASTM D4878)	A-20±5, B-20±5	A-20±5, B-20±5
Shelf life @ 77 °F /25 °C	12 months	12 months
Flash point Pensky Martin	>150 °F	> 66 °C
Compressive strength (ASTM C42)	4750±400 psi	32.7±2.7 MPa
Hardness (ASTM D 2240)	70±5 Shore D	70±5 Shore D
Tensile Strength (ASTM D 412)	4000±400 Psi	27.6±2.7 Mpa
Elongation ASTM D 412	7%	7%
Bond strength to concrete	Excellent	
Thermal compatibility to concrete	Good	
PROCESSING PROPERTIES (Under standard lab conditions)		
Mix Ratio V/V	1:1	
Pot Life	3 to 4 minutes	
Tack Free	8-20 minutes	
Recoat time	20-30 minutes	
Properties and values are highly dependent on equipment, spray gun, mix chamber temperature, pressure and related parameters. Variations are possible and expected.		

SURFACE PREPARATION:

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 3 to 4 mils (75 -100 microns). Soluble salts must be removed to an acceptable levels. **Refer to NCSI surface preparation manual for detailed procedures for different types of substrates.**

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.

Hairline Crack Repair: Blow out the cracks with dry compressed air to remove loose and unsound material.

Large Crack Repair: Remove loose and unsound material in the crack by blowing the cracks with dry compressed air. Fill the cracks with sand that is at least 20 mesh or larger.

APPLICATION:

Nukote Polyprime II should be applied using a proportioning dispensing system. This type of system transfers, meters, and mixes the co-reactive Side-A and Side-B components at a very high rate and at the required proportions. It transfers from five or fifty five gallon containers, through proportioning pumps at the specified ratio of 1:1. Both components are pumped through a disposable static mixing tube with restrictor plugs. The combined mixture can then be dispensed into the gravel or sand prepared crack.

Material left in the static mixing tube will thicken in approximately 2-3 minutes and solidify in 6-10 minutes. Static mixing tube should then be discarded.

Allow primer to be tack free (8-20 minutes) before over coating. The product is also suitable for application in extreme cold weather 10 °F (-12 °C).

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.

Nukote Polyprime II is difficult to clean up after it has cured. Equipment should be cleaned with environmentally safe solvent, as permitted under local regulations, immediately after use.

LIMITATIONS:

Do not open until ready to use, and store in a sealed container after opening. Containers that have been opened must be used as soon as possible. Surfaces must be dry, clean and free of foreign matter. Not UV stable. Will discolour in exterior applications.

WARNING:

This product contains Isocyanate and solvent.

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.