
DESCRIPTION:

NUKOTE PP400 is the next generation, high-performance, full-structural liner developed for infrastructure rehabilitation applications. This specially designed hybrid-elastomeric material enabled quick installation and return to service while providing robust performance against high mechanical, thermal, environmental, and chemical stresses. Product allows the unique capability to overcoat up to 30 days from previous application without layering.

TARGET APPLICATIONS:

- Spray-in-Place structural liners for pipe (all substrate types).
- Suitable for potable water, sewer, storm water, COMBI and other effluents.
- Suitable for culverts, gravity flow lines, pressure mains, manholes & wet wells etc.
- Tanks, basins & other containment structures.
- Also suitable for mining and mineral processing, petrochemical, power generation

COLORS:

Standard grey, blue, red, white. Custom colors available upon request subject to minimum order quantity.

PACKAGE:

100-gallon (380-liter) drum sets, shipped in metal drums of 50 gallons (190 liters) each for side A and side B 10-gallon (38-liter) kits, shipped in plastic pails of 5 gallons (19 liters) each for side A and side B. 275-gallon (1045 liter) totes are also available.

COVERAGE:

Nukote PP 400 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:

Twelve months in factory delivered, unopened drums. Keep away from extreme heat, freezing, and moisture. The use of drum heaters is encouraged to reduce material viscosity at low temperatures. Do not open until ready to use, and store in a sealed container after opening. Adding a nitrogen blanket to any opened containers is strongly recommended prior to storage.

MIXING:

Nukote PP400 shall not be diluted under any circumstances. Thoroughly mix Nukote PP400 Part B resin material with air driven power equipment until a homogeneous mixture and color is obtained, usually accomplished through the dedicated spray equipment.

SURFACE PREPARATION:

See project specific method statement for your unique requirements.

APPLICATION:

Nukote PP400 must be applied utilizing high-pressure, heated component spray proportioning equipment, like those manufactured by Graco®. See project-specific method statement for your unique requirements.

WARRANTIES AND DISCLAIMERS:

Nukote Coating Systems International, 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.

TECHNICAL DATA (All values @ 77 °F / 25 °C)	US	Metric
Solids by volume (ASTM D2697)	100%	100%
Volatile organic compounds (ASTM D2369)	0 lb./gal	0 gm/ liter
Theoretical coverage	40 ft ² /gal @ 40 mils	1m ² / lit @ 1mm
Specific Gravity* of materials (ASTM D792)	A:10.4±0.2, B:8.9±0.3 lb./gal	A:1.25±0.5, B: 1.07±0.1kg/ liter
Viscosity* at 80 °F/27 °C in cps (ASTM D4878)	A:200±100; B:7000±1000	A:200±100; B:7000±1000
Viscosity* at 158 °F/70 °C in cps (ASTM D4878)	A:50±20; B:230±50	A:50±20; B:230±50
Shelf life @ 77 °F /25 °C	12 Months	12 Months
Water absorption -24 hours (ASTM D570)	0.5%	0.5%
Flash point Pensky Martin	A:446°F, B: 302°F	A:230°C, B: 150°C
Service temperature (Dry)	-10 °F to 200 °F	-17 °C to 90 °C
PROCESSING PROPERTIES (Under standard lab conditions)		
Mix Ratio (V/V)	1:1	
Gel time	2 to 6 seconds	
Tack free time	20 to 30 seconds	
Recoat Window	30-Days	
Return to service	24 hours	
<i>Physical properties vary dependent on application equipment and method.</i>		

* Specific gravity and viscosity values of B-sides vary dependent on pigment loading.

TENSILE AND MECHANICAL PROPERTY PERFORMANCE	Design Values**	Acceptable Minimum Value***
Tensile Strength (ASTM D638)	8,840 psi / 60.9 MPa	7,960 psi / 54.9 MPa
Elongation (ASTM D412-C)	3.5 ± 0.5 %	3.5 ± 0.5 %
Hardness (ASTM D2240)	82 Shore D	78 Shore D
Flexural Strength (ASTM D790)	13,952 psi/ 96.2 MPa	12,420 psi / 86.6 MPa
Flexural Modulus (ASTM D790)	394,000 psi / 2,717 MPa	355,000 psi/ 2,445 MPa
Shear Strength (ASTM D732)	3,919 psi/ 27.0 MPa	3,519 psi/ 24.3 MPa
Tensile Modulus of Elasticity (ASTM D638)	380,000 psi/ 2,620 MPa	342,000 psi/ 2,358 MPa
Rupture Modulus (ASTM D638)	255,000 psi/ 1,758 MPa	230,000 psi/ 1,582 MPa

**Design values shown are derived from third party laboratory testing to arrive at the Mean value.

*** Acceptable minimum values shown can be used in product field conformance testing. Final cured material properties vary dependent on (laboratory procedures; compliance with standards-calibrations-calculations used), material processing equipment parameters, environmental conditions, manual spray parameters, robotic equipment parameters, deposition techniques, substrate conditions, and machining of the test specimens.