

DESCRIPTION

Nukote PA is 100% solids by volume, aliphatic aspartic pure polyurea. This product has been specifically formulated to be used as a protective coating for steel, wood, urethane foam, concrete, concrete block, brick and other types of masonry surfaces. Nukote PA is extremely color stable with high gloss and displays excellent UV weathering characteristics. The product can be applied in temperatures ranging from 10°C to 70°C, and performs in service temperatures from -20°C to 100°C. When fully cured, Nukote PA exhibits a color fast, high-gloss finish (finish can also be flat and textured) that will not fade or yellow providing resistance to chemicals, abrasion, oxidation, thermal cycling and other extreme weather conditions. As a topcoat, Nukote PA will provide added UV protection and durability to all Nukote aromatic polymer formulations.

FEATURES

- Available in any color
- Excellent weatherability
- Excellent UV resistance
- High gloss or flat textured finish
- USDA acceptable-Meets FSIS directive
- Self priming to most substrates
- Good tensile strength
- Good resistance to chemicals
- Brush, roller or spray applicable
- Fast cure
- 100% solids
- Color fast

TYPICAL USES

Nukote PA is color fast, self priming and adheres well to most substrates. The product has very low permeability levels providing a strong waterproofing membrane at low dry film thickness levels and performs well in applications where exposures to ultraviolet, chemicals, salt water, abrasion and other extreme conditions are present and can be applied using common brushes, rollers or airless spray equipment. Nukote PA provides complete color coverage over bare substrates or other aromatic polymers at very low film thickness levels.

- Architectural exterior finishes on steel or concrete
- Immersed anti-corrosion applications
- Line striping and marking
(including airport runway markings)
- Marine life exhibits, tanks and habitats
- Stadiums, aquariums and zoos
- Other applications that require durable color fast protection

COLORS

Available in any color by RAL number.

PACKAGING

40-liter, 200 liter or 400 liter sets.

COVERAGE

Nukote PA covers from dft levels from 300 microns and up. The product is applied in lift coats of 100-125 microns and can be built up to any desired final dft. Theoretical coverage is 1 m² per liter (for 100% solids formulations).

PHYSICAL PROPERTIES @ 24°C

Solids By Volume	100%
Volatile Organic Compounds	0 g/l
Theoretical Coverage @ 1000 Microns	1 m ² /L
Weight Per Liter in Kilograms	A:0.55 B:0.62
Viscosity (cps) @ 25 °C	A:2300 to 2900
Viscosity (cps) @ 25 °C	B:800 to 1100
Shelf Life @ 10°C to 50°C	12 to 18 Months
Tensile Strength @ 25°C ASTM D-412	18 to 22 N/mm ²
Elongation @ 25 °C ASTM D-412	25% to 50%
Hardness (Shore D) ASTM D-2240	62 to 67
Flexibility 3mm mandrel ASTM D-1737	PASS
Tear Strength Die C ASTM D-624	60 to 70 kN/m
Fire Rating UBC	Class 2
Flash Point Pensky-Martin	>93°C
Service Temperature Range-Dry	-20°C to 100°C
Abrasion Resistance ASTM D-4060	<20 mg loss
Taber CS17 1000mg / 1000rev.	

PROCESSING PROPERTIES @125 MICRONS 24°C/54% RH

Gel Time (Adjustable)	5 to 10 min.
Tack Free Time (Adjustable)	30 to 90 min.
Post Cure Time	12 Hours
Volume Ratio (A:B)	1 to 1
Block Temperature	-
Hose Temperatures (A and B)	-
Constant Pressure	-

CLARIFICATION OF PROPERTY VALUES

The physical properties shown in the above table are defined in a range of values to allow for compliance when testing of sprayed films or laboratory draw down films. Results derived from independent testing will fall within the ranges shown if the testing performed complies with the standards utilized for each individual property shown. Results vary dependent on several factors, including: the equipment utilized, product mix ratios, application pressures, application temperatures, ambient temperatures, dry film thickness, age of the sample tested, etc. Results also vary dependent on the film type tested with laboratory draw down films deriving higher properties than sprayed films. Test results from films of at least 30-days in age will provide higher values than results from younger films as chemical cross-linking requires this time period to complete.

SURFACE PREPARATION

Nukote PA adheres well to several sound substrates including concrete, steel, and wood. All surfaces should be free of loose particles, grease, oil, unsound material, dust and dirt. Nukote PA can be applied by brush, roller or airless spray equipment systems.

MIXING

Nukote PA can be supplied in 100% solid condition or diluted with solvents and ready to apply. For mixing instructions on 100% solids material, refer to the instructions sent with each package shipped for details on your specific application method. Do not mix any material that can not be used within 45 minutes.

APPLICATION

Nukote PA can be applied by phenolic resin core roller, high pressure spray, or through a cup gun under low pressure. Nukote PA should be applied at a minimum film thickness of 125 microns. It should be noted that the heavier the application, the longer the curing process takes.

Apply Nukote PA evenly.

EQUIPMENT CLEANUP

Cured product may be disposed of without restriction. "Drip free" containers should be disposed of according to local, state, and federal laws.

STORAGE

Twelve to eighteen months in factory delivered, unopened containers. Keep away from extreme heat, freezing and moisture.

WARNING

MSDS will be mailed immediately upon receipt of a purchase order or upon request. All personnel should read and understand the safety recommendations. All body parts should be covered and respirators are required for safe application of this product. Keep uncured product away from children at all times.

CHEMICAL RESISTANCE

Each Nukote product formulation has varying levels of resistance to specific chemicals. Please review the chemical immersion test data included in the Nukote Test Book for general resistance to specific chemicals at specific concentration levels. Chemical concentrations are complex and when combined with temperatures above ambient levels this complexity increases exponentially. Contact Nukote Technical Personnel for specific recommendations for chemical resistance prior to specifying these products in this application type.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local NCSI representative or visit our website for current technical data and instructions.

Nukote Coating Systems International, LLC has a general product warranty and project specific warranties. Both warranties are backed by years of industry experience and insurance policies with a multinational insurance company. For information on the general product warranty please see below or contact NCSI for more information. For project specific warranties, these are available on a case-by-case basis. NCSI technicians must sign off on the specification, and in most cases a NCSI technician will be onsite during application to inspect surface preparation and application. For more detailed warranty contact a NCSI office.

NCSI has a comprehensive training program for our qualified applicators and distributors. Please contact your local NCSI office or representative or visit our website for information on our training program or for current technical data and instructions.

LIMITED WARRANTY

NCSI warrants its products to be free of manufacturing defects. Polyurea and other multi-component products are technically manufactured at the time they are mixed. When mixed in accordance with NCSI guidelines, NCSI warrants the product will meet NCSI's technical specifications. NCSI warrants its products, when properly installed over a properly prepared substrate, will perform as designed and specified.

Unless otherwise stated in writing, NCSI's sole responsibility shall be to replace the defective product. There are no other warranties by NCSI of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. NCSI shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. NCSI shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature or physical movement of the substrate or structural defects are also excluded from the limited warranty. NCSI reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are neither guaranteed nor to be construed as a warranty, either expressed or implied.

It is the user's responsibility to satisfy themselves by their own, independent tests, to determine suitability of the product for their own intended use, application and job situation. The user assumes all risk and liability resulting from his use of the product. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a NCSI corporate officer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures.

Test performance results were obtained in a controlled environment and NCSI makes no claim that these tests or any other tests accurately represent all environments.