

DESCRIPTION

Nukote XT is a special coating for applications with extreme conditions like long-term wastewater immersion or applications with chemical content. Nukote XT is a 100% solid, modified polyurea that displays outstanding physical properties with high microbial and bacteria resistance including anaerobic and aerobic microbial waste by-products.

FEATURES:

- 100 % solids with NO VOC's
- Very high tensile strength and elongation
- Good Flow Properties
- Seamless, flexible, resilient and waterproof
- Resistant to microbial wastes, alkalis and mild acids
- Low permeability
- Fast reactivity and cure time with no catalysts
- Application temperatures from -30°C to 170°C
- Service temperatures from -10 °C to 125 °C
- Almost immediate return-to-service times

TYPICAL USES

Nukote XT is designed for use on concrete, steel, or other substrates in immersion applications with water, wastewater, sewage, landfill and effluent treatment facilities. Nukote XT can also be used as a protective, elastomeric membrane coating in:

- Manufacturing ,processing and Industrial facilities
- Numerous marine applications
- Food processing plants
- Nuclear, coal fired and traditional Power plants
- Sewerage processing equipment and tanks
- Primary and secondary containment for chemical processing *

COLORS

Standard colors available are grey and limited customized colors are available on request.

PACKAGING

Pack Size: 38 liters kit in plastic pails (19 liters A: 19liters B)
380 liters kit in metal drums (190 liters A: 190 liters B)

Side A and Side B are separately packed.

TECHNICAL DATA

(Physical properties-Typical Values)

Solids by Volume	: 100 %
Volatile Organic Compounds	: 0 gm / lit
Theoretical coverage 1mm	: 1m ² / lit
Weight per liter	: A: 1.056, B: 1.052
Viscosity at 25°C in cps (ASTM D 412)	: A: 960, B: 450
Shelf life up to 50 °C (months)	: 12 to 18
Tensile strength@25 °C ASTMD 412 (Mpa)	: 20 to 25
Elongation ASTM D 412 (%)	: 350-450
Hardness (Shore D)	: 45 to 55
Flexibility (3 mm mandrel ASTM 1737)	: Pass
Tear strength (Die C ASTM 624) (KN/m)	: 80 to 85
Fire Rating	: Class 2
Flash point Pensky Martin	: >93°C
Service temperature (Dry)	: -30 °C to 125° C
Service temperature (Immersion in Water)	: 80°C
Abrasion Resistance ASTM D 4060 (Taber CS17 1000 mg/ 1000 Rev)	: < 15 mg loss

Processing properties under standard lab conditions

Mix Ratio V / V	: 1A:1B
Gel time (adjustable) (seconds)	: 10 to 20
Tack free time seconds	: 30 to 90
Post cure time (hours)	: 24
Immersion	: 12
Block Temperature (°C)	: 70 to 75
Hose temperature (A & B) (°C)	: 70 to 75
Fluid pressure (Bar)	: 140-150

CHEMICAL RESISTANCE ASTM D3912 (24 HOUR IMMERSION)

CHEMICAL	RESULTS @ 25 °C
Acetic Acid (5%)	R
Anti-Freeze	R
Brake Fluid (DOT3)	RC
Diesel Fuel	R
Gasoline	R
Hydrochloric acid (10%)	R
Motor Oil I	R-DIS
Sodium Hydroxide (10%)	R
Sulphuric Acid (25%)	R-DIS
Hydrogen sulphide	R
Transmission fluid	RC
Jet fuel JP4	RC
Xylene	RC

R: RECOMMENDED (NO VISIBLE DAMAGE), RC (CONDITIONAL RECOMMENDATION) WITH SOME EFFECTS LIKE WITHIN ONE HOUR TO AVOID EFFECTS) SWELLING, DISCOLORATION, CRACKING, WASH DOWN. NR: NOT RECOMMENDED. DIS: DISCOLORATION.

**Consult NCS technical Service for list of chemicals for immersion services*

COVERAGE:

Nukote XT may be applied at any rate to achieve any desired thickness. Theoretical coverage for 1 mm thickness is one liter per m².

SURFACE PREPARATION:

Surface preparation is an important entity of the NCS coating procedures. While polyurea products are generally applied directly to the surface after suitable surface preparations and priming. Nukote XT should always be applied over a suitable primer for maximum adhesion

Refer to NCS surface preparation manual for more details

MIXING:

Nukote XT must not be diluted under any circumstances. Use appropriate solvent for purging line and flushing of equipment and if spraying stops for a period of time in excess of the pot life of the material. Thoroughly mix Nukote XT part B resin material with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION

This material may be applied using the high-pressure, heated plural component spray proportioning equipment, such as those manufactured by **GRACO**® or of equivalent specifications, but it is designed to be applied using NCS low pressure both hand held and full size application equipment. After proper preparation, Nukote XT should be applied in a cross directional method. Recommended DFT's are a function of the project, please contact a Nukote technician. On horizontal surface applications, a texture "stipple" coat can be applied for nonskid purposes, after reaching the initial desired film thickness.

EQUIPMENT CLEAN UP:

Cured product may be disposed off without restriction. The uncured isocyanate and resin portions should be mixed together and disposed off in a normal manner. "Drip free" containers should be disposed off according to local environmental laws and ordinances.

STORAGE

Nukote XT can have a safe life of 12 to 18 months in factory delivered containers. Care is to be taken to keep away from extreme heat, freezing and moisture. The use of drum heaters is encouraged to reduce material viscosity at low temperatures.

LIMITATIONS

Do not open until ready to use, and store in a sealed container after opening. Adding a nitrogen blanket is strongly recommended.

WARNING:

This product contains isocyanate and curatives.

Before using Nukote products kindly read the product data sheets, material Safety data sheets (MSDS) and guide specifications prior to actual application. For details on training programs, technical guidance and updates on data sheets please contact the nearest Nukote office or representative.

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.

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.

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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.

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