

DESCRIPTION

NCSI's experience in the international industrial coatings industry is world renowned and unrivalled by any other manufacturer. Our range of primers and concrete treatments complements our unique advanced polyurea polymer coatings so that complete solutions are available for nearly all coating applications.

Nukote HLT is a unique VOC/VOS free penetrant in a colloidal liquid base which, when applied to Portland cement concrete eliminates or significantly reduces potential for pin-holing in a polyurea top coat even with damp concrete and hydro-static pressure.

Applied to freshly poured concrete, Nukote HLT produces a superior concrete that can be coated with polyurea with a reduced concrete cure time.

Nukote HLT purges oil and other contaminants from within the concrete however for serious contamination, Nukote recommend using Nukote HPT.

Nukote HLT forms a permanent, passive, non destructive colloidal gel barrier beneath the concrete surface.

Nukote HLT is applied as a single coat with an airless spray unit where it penetrates up to 200mm.

For best results, use in conjunction with a recommended Nukote polyamide epoxy primer system.

FEATURES

- 100% VOC free
- As Nukote HLT fills concrete pores, voids and capillaries with an insoluble, permanent precipitate barrier, contaminants are purged to the surface for easy removal
- Fills micro-pores and subsurface voids and inhibits vapour transmission to minimise out-gassing, which can promote pin-holing and blisters in a polyurea spray applied coating
- Withstands a maximum of 35m of hydrostatic pressure
- Can be applied to the positive or negative sides of concrete structures
- Arrests leakage through concrete even while it is occurring travels against the water flow, when applied on the negative side
- Densifies, strengthens and waterproof new and old concrete
- Acts as an effective chloride and electrolyte barrier to preserve and protect embedded steel
- Reacts with and converts free alkali, calcium hydroxide and other unused residues
- Absorbs totally into the concrete and does not affect the surface profile

PHYSICAL PROPERTIES

Volatile Organic Compounds	0 g/l
Theoretical Coverage	4.5 m ² /L
Weight Per Liter	1.1kg
pH	11.5
Flammability	None
Toxicity	None
Clean Up Solvent	Water

- When applied as a curing agent on newly poured concrete, Nukote HLT minimises surface voids, imparts far greater strength, durability and impermeability, with greater resistance to freeze damage and chemical attack
- Nukote HLT is primarily intended as a pre-treatment prior to application of Nukote polyurea however significant benefits are achieved by applying Nukote HLT only

TYPICAL USES

- Pre treatment for concrete to minimise pin-holes
- Contaminated Concrete
- Wet, Damp Or Below Grade Concrete
- Concrete With Corrosion of Embedded Steel
- Curing Agent For Freshly Poured Concrete

COLOUR

Cloudy white, dries clear

PACKAGING

Nukote HLT is available in 20 litre plastic pails, 200 litre steel drums or 1200 litre plastic totes.

APPLICATION

On Existing Concrete

Remove any coating or surface finish that may resist penetration into the concrete interior.

Place a few drops of water on the surface to test surface porosity. If the water doesn't soak in immediately it needs to be opened up with grinding, sweep blasting or similar.

Apply using a medium to high pressure airless spray unit with a 0.019" fan spray nozzle.

Keep spray tip 150mm from the surface and work side to side and from the bottom up (if applicable)

Apply at approximately 4.5 m² per litre with a spray pattern overlapping 50%. Very porous surfaces may need more.

Wait at least 24 hours then flush with water to remove purged salts, particles and other contaminants.

Where contaminants have been purged, retest the surface for porosity. If additional contaminants are present, the surface will not absorb water and an additional treatment of Nukote HLT is required

Carry out surface treatment and polyurea application to Nukote specifications.

On New Concrete

Nukote HLT provides an alternative cure method providing cure equal to or better than water curing. Concrete is significantly more water proof, abrasion resistant, chemical resistant and less likely to produce pin-holing in a polyurea coating.

Nukote HLT should be applied with a low pressure spray apparatus or flooded on as soon as practicable following surface finishing. Recommended minimum coverage is 4.5m²/litre for broom finish and 6–7 m²/litre for burnished finish.

PRECAUTIONS

- Nukote HLT may etch glass or dull shiny aluminium
- Nukote HLT spray mist is not hazardous to breathe however we recommend wearing a face mask
- Protect areas not intended for coverage
- Do not apply when the temperature is near freezing
- For more information read the MSDS

LIMITATIONS

Do not open until ready to use, and store in a sealed container after opening.

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.