
DESCRIPTION:

Nukote MVB Prime is a clear 2-component, 100% solids, low odor, low viscosity epoxy that is specifically formulated as a moisture barrier coating to treat new and existing concrete substrates with high moisture and high pH. Nukote MVB Prime can be used as a one-coat moisture vapor barrier coating suitable for various types of concrete. The low viscosity formula not only promotes deeper concrete penetration for superior substrate adhesion, but also generates higher propensity for sealing and blocking moisture drive than standard epoxy product.

Nukote MVB Prime offers you 2 types of hardeners depending on application demands and ambient temperature conditions. An appropriate hardener (Side B) should be chosen for the best curing results. Our products have a "S" or "F" at the end of the product name to denote the different system requirements. If in doubt as to the correct (Side B) to use just ask us.

"S" – Standard Curing Hardener allows an application ranging between 50°F to 80°F. This hardener is our primary workhorse, a well-rounded system, perfect for versatile applications.

"F" – Fast Curing Hardener designed for faster set times, or lower temperature application ranging between 40°F to 60°F.

FEATURES:

- 100% Solids, Low VOC, Low Odor
- Vapor Control for High Moisture and High pH Slabs
- One-Coating Moisture Vapor Barrier
- Excellent Concrete Adhesion
- Standard and Fast Drying Times
- Low Viscosity for Deeper Concrete Slab Penetration
- Controlled Vapor Pressure up to 25lbs.

TYPICAL USES:

- Manufacturing & Warehouse Floors
- Laboratories
- Mechanical Rooms
- Animal Care Areas
- Shop Floors
- Loading Docks
- Pharmaceutical Plants
- Retail Stores
- Multiple-Unit Housing
- Institution Facilities
- Excellent Moisture Blocker
- Underneath any Coatings Showing Concrete Contamination
- Underneath Various Floorings Such as Carpet, Wood, Rubber, Vinyl, Tile, & Linoleum/PVT

COLORS:

Clear

PACKAGING:

3-gallon (11.34-liter) and 15-gallon (57-liter) 2 sided kits

COVERAGE:

Calculation for theoretical coverage: 100 Ft²/gal @ 16 mils WFT (2.45 m²/liter @ 406 microns).

Number of coats: 1 coat

STORAGE:

Twelve months in factory delivered, unopened drums. Store on pallets and keep away from extreme heat, freezing, and moisture between 50 to 110 °F. The use of drum heaters is encouraged to reduce material viscosity at low

| TECHNICAL DATA (All values @ 77 °F / 25 °C) | US | Metric |
|--|--|--|
| Volatile organic compounds (ASTM D2369) | 004 lb./gal | 5 gm/ lit |
| Theoretical coverage | 100 ft ² /gal @ 16 mils | 2.54m ² / lit @ 406 microns |
| Specific Gravity of materials (ASTM D792) | 9 lbs./gal | 1.08 kg/ liter |
| Shelf life @ 77 °F /25 °C | 12 Months | 12 Months |
| Tensile strength (ASTM D412-C) | 7500 psi | 52 MPa |
| Elongation (ASTM D412-C) | 1.5-2 % | 1.5-2 % |
| Hardness (ASTM D2240) | 70 to 85 Shore D | 70 to 85 Shore D |
| Water absorption -24 hours (ASTM D570) | < 1 % | < 1% |
| Coefficient of Friction (ASTM D2047) | 0.7 smooth | |
| Permeance (ASTM E96) | 0.017-0.022 (gr/ft ² /hr/inHg) | |
| Impact Resistance (ASTM D2794) | > 160 in-lbf | > 18 J (N-m) |
| Flame Test (ASTM D648) | Class 1 | |
| Abrasion Resistance (ASTM D4060) weight loss | < 30 mg loss Taber CS 17 wheel 1Kg/1000 rev | |
| PROCESSING PROPERTIES (Under standard lab conditions) | | |
| Mix Ratio V/V | 2A:1B | |
| Pot life @ 70° F / 21° C & 50% RH | 10-15 minutes (Fast) | |
| | 15-20 minutes (Standard) | |

| | |
|--|----------------------|
| Touch dry @ 70° F / 21° C & 50% RH | 3-4 hours (Fast) |
| | 4-6 hours (Standard) |
| Recoat time @ 70° F / 21° C & 50% RH | 2-24 hours |
| <i>Properties and values are highly dependent on equipment, spray gun, mix chamber temperature, pressure and related parameters. Variations are possible and expected.</i> | |

SURFACE PREPARATION:

Concrete:

Concrete must be structurally sound and free of curing membrane, paint or other sealer. If you suspect that the concrete has been previously sealed, call NCSI technical support for further instructions.

CHECK FOR MOISTURE

Concrete must be dry before application of this floor coating material. Concrete moisture testing must occur. Calcium chloride testing or “In-situ” relative humidity testing is recommended. Test methods can be purchased at www.astm.org, see ASTM F1869-11 or F2170-11, respectively or follow manufacturer’s instructions. Readings must be below the defined threshold as specified for each system to be installed directly to the concrete substrate. Please refer to the appropriate Technical Data Sheet for this information.

CHECK THE TEMPERATURE & HUMIDITY

Floor temperature and materials should be between 65°F (18°C) and 90°F (32°C). Humidity must be less than 95%. DO NOT coat unless floor temperature is more than (5°F) over the dew point.

SURFACE PREPARATION

Requires ICRI CSP 3

This product requires proper surface profile to perform as expected. Substrate must be mechanically profiled (ASTM 4259-83), clean, sound, and dry.

APPLICATION:

APPLICATION EQUIPMENT

Tools: 3” Disposable brush, low speed drill (450 rpm) with a 3.5” Jiffler blade, 3/8” nap non-shedding phenolic core roller, and flat rubber squeegee.

MIXING:

This product cannot and must not be thinned or diluted under any circumstances.

The volume mixing ratio is 2 part Side-A to 1 part Side-B .

The temperature of the (A) and (B) portions should be between 70° and 80°F (20°-25°C). Mix them separately to ensure a uniform consistency. For a 3 gallon kit add (Side-B) into (Side-A) in a 3.5 gallon bucket. Mix contents thoroughly until all components are completely incorporated and no streaking is observed. Thinning is not recommended. The portions of each side is accurately measured to ensure optimum product performance. Pouring from one container to the other (boxing) during mixing is very helpful in ensuring complete mixing. Mix for 2 minutes.

ROLL ON

After mixing all contents as instructed, immediately pour out into a ribbon on the surface. Squeegee the material out evenly and check for desired film thickness by using a wet-film thickness gauge. Back-rolling and then cross rolling is critical. Allow to dry minimum of 12 hours before recoat.

EQUIPMENT CLEAN UP:

Clean-up mixing station, tools and application equipment immediately after completion. Use suitable solvent as specified by NCSI Technical Services Team or if permissible by law, xylene, as a general over-the-counter solvent. Observe all fire hazards, legal, and health and safety precautions when handling or storing solvents, particularly in confined spaces. Make sure the working area is well ventilated at all times during application and curing times.

LIMITATIONS:

This product is best suited for application in temperatures between 60°F and 90°F. Do not use to grout coat over aggregate. [Certain colors appear white when scratched such as blue based.] Higher temperatures will result in faster dry times and/or poor workability. Color may vary due to batch-to-batch variation, especially in higher temperature. Do not apply over ponding water.

WARNING:

Eye and skin irritant. May cause dermatitis and sensitization.

Always read and understand the product SDS. Avoid contact with eyes, skin or clothing. Avoid breathing vapor, mist or spray. Use with good ventilation.

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.