NUKOTE Metal Prime II

DESCRIPTION:

Nukote Metal Prime II is a two component, high solids, liquid applied surface tolerant primer. This universal surface tolerant primer has been developed for use on carbon steel, non-ferrous metal, fibreglass, PVC pipe, as well as concrete and masonry. The Primer is suitable to be used with Potable water certified products.

Nukote Metal Prime II is suitable for Power tool prepared substrate to St 2 when environmental, economic or safety concerns restrict abrasive blast cleaning. The extraordinary penetrating properties of Metal Prime II provide exceptional means for reinforcing rusty steel substrates insuring adhesion of subsequent coatings. Improves the effectiveness and efficiency of the coating by penetrating and sealing crevices, joints, back-to-back angles of existing structures and edges of old coatings, improving the service life of the maintenance system. Also serves to seal aged "White Rusted" zinc surfaces for re-coating. Consult with NCS for special applications.

FEATURES:

- High solids with low VOC
- Long pot life
- Very low viscosity
- Applies easily by brush, roll or spray
- Cures to a tough, water resistant coating
- Penetrates surface rust, crevices, and back-to-back angles
- Penetrates pores/small cracks in masonry and concrete
- Formulated without lead, chromate or mercury components
- Reinforces rusty steel, masonry and aged "White Rusted" zinc surfaces.
- No shrinkage.

TYPICAL USES:

- Carbon steel
- Galvanized Steel
- Aluminum
- Concrete and Masonry

COLORS:

Grey with a medium sheen Part-A: Grey, Part-B: Amber. Special colors are available on request subject to Minimum quantities.

PACKAGING:

3-gallon (11.34-liter) kit: Two 2-gallon (3.78-liter) cans of Part-A gray liquid and one 1-gallon 3.78-liter can of Part-B amber liquid. 15-gallon (57-liter) kit: Two 5-gallon (19-liter) pails of Part-A gray liquid and one 5-gallon (19-liter) pail of Part-B amber liquid.

COVERAGE:

Nukote Metal Prime II spread rate is 366 ft^2/ gal at 4 mils (9 m2/liter at 100 microns) thickness without factoring any loss.

STORAGE:

Fifteen to eighteen months in factory delivered, unopened drums. Store on pallets and keep away from extreme heat, freezing, and moisture.

TECHNICAL DATA (All values @ 77 ºF / 25 ºC)	US	Metric
Solids by volume (ASTM D2697)	90%	90%
Volatile organic compounds (ASTM D2369)	0.75 lb./gal	90 gm/ lit
Theoretical coverage	366 ft^2/gal @ 4 mils	9 m^2/lit@100 microns
Specific Gravity of materials (ASTM D792)	A: 9.1, B: 8.93 lbs./gal	A:1.109, B:1.07kg/ liter
Viscosity at 77 ºF /25 ºC in cps ±10% (ASTM D4878)	A: 500-700 , B: 700-800	A: 500-700 B: 700-800
Shelf life @ 77 ºF /25 ºC	15 to 18 Months	15 to 18 Months
Flash point Pensky Martin	200 ºF	93 ºC
PROCESSING PROPERTIES (Under standard lab conditions)		
Mix Ratio V/V	2 A:1 B	
Pot life	20 to 30 minutes	
Tack free time (DFT & Temperature dependent)	4 to 5 hours	
Max recoat time	24 to 30 hours	
Properties and values are highly dependent on equipment, spray gun, mix chamber temperature, pressure and related parameters. Variations are possible and expected.		

MIXING:

Nukote Metal Prime II might not be diluted under any circumstance. The volume mixing ratio is 2 part side-A liquid to 1 part side-B liquid. Nukote Metal Prime II Part-A and Part-B should be thoroughly mixed individually prior to combining. The combined components should be thoroughly mixed using mechanical mixer at slow speed or for at least 5 minutes if mixed by hand.

SURFACE PREPARATION:

Concrete:
The surface of a concrete subfloor should be dry, smooth, structurally sound and free of depression, scale, or foreign deposits of any kind. Remove all curing compounds. Abrasive blast, sweep blast or water blast to remove all latent material and expose voids. All concrete substrates, on or below grade level should be tested for moisture content. On-grade or below-grade concrete floors or slabs should have a moisture barrier installed to protect from ground moisture. The surface preparation of concrete should meet and conform to Joint NACE 6/SSPC-SP 13 standards and achieve a concrete surface profile of CSP 3 to CSP 6 as per ICRI Guideline No.03732 for optimum performance

Metal:
All surfaces should be clean and free from contamination. The surface should be assessed and treated in accordance with ISO 8504, Abrasive blast the surface to minimum NACE-2/SSPC SP-10/Sa 2.5, as per ISO 8501-1, for a visual assessment of surface cleanliness with an anchor profile of 3 to 4 mils (75 -100 microns). Soluble salts must be removed to an acceptable levels. ***Refer to NCSI surface preparation manual for detailed procedures for different types of substrates.***

APPLICATION:

Can be applied utilizing an airless sprayer, conventional spray equipment, brush, or phenolic resin core roller. Surface temperature should be greater than 50 °F (10 °C) and at least 37 °F (3 °C) above the dew point. Nukote Metal Prime II is very sensitive to heat and moisture. High temperatures and/or high humidity will significantly accelerate the cure time and pot life. Use caution in batch sizes and thickness of application. Low temperature and/or low humidity extend the cure time.

EQUIPMENT CLEAN UP:

Cured product may be disposed of without restriction. Uncured Isocyanate and resin portions should be mixed together and disposed of in accordance with local regulations. Containers should be disposed of according to local environmental laws and ordinances.
Nukote Metal Prime II is difficult to clean up after it has cured. Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

LIMITATIONS:

Do not open until ready to use, and store in a sealed container after opening. Containers that have been opened must be used as soon as possible. Surfaces must be dry, clean and free of foreign matter. Not UV stable.

WARNING:

This product contains epoxy and curatives.

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.