



Specialty Flooring Products

TECHNICAL DATA: LOHS HIGH PERFORMANCE URETHANE

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LOHS High Performance Urethane

NC- LOHS High Performance Urethane (NC-LOHS-HPU) is a three component low odor high solid urethane coating. This coating is extremely abrasive and chemical resistant, with superior flexibility and is UV stable

Recommended Uses

We recommend our High Performance Urethane anywhere chemical resistance is needed, such as auto service and garages, warehouses, laboratories, aircraft hangers, cafeterias, exterior tanks, indoor or outdoor service and chemical exposure areas.

General Product Data

SOLIDS BY WEIGHT / VOLUME:

Mixed= 93% solids by weight / 92% solids by volume (+,-2%)

VOLATILE ORGANIC CONTENT:

Less than 100 grams per liter (for colors or clear mixed)

MIX RATIO:

1.08# part A with 6.45# part B and 3.0# part C (weights approximate)

PACKAGING INFORMATION

1 gallon kits (1 pint part A) with (0.70 gallons part B) and (3.0# part C.) (weights and volumes approximate) (approximately 0.95 gallons)

REQUIRED FILM THICKNESS / COVERAGE PER GALLON:

3.2 mils per coat wet thickness (yields 3 mils dry) / 500 sqft per gallon

VISCOSITY:

Mixed liquids A/B = 1000-2000 cps (typical)

STANDARD COLORS:

Opaque clear/amber clear with color options using our urethane color packs. The colorants may be added at the ratio of 1 pint per gallon kit of the NP358 product. However, the colorants may not impart a total hide over dissimilar colored basecoats and therefore, a basecoat must be applied in the same color before applying this product. Color packs available for this product line are white, off white, light gray, medium gray, charcoal gray, tile red, tan, light blue and blue. The clear is not suitable as a topcoat over colored systems.

FINISH CHARACTERISTICS:

Semi-gloss/eggshell (typical gloss is 20-40 @ 60 degrees)

IMPACT RESISTANCE:

Gardner Impact = 160 in. lb. (passed)

ADHESION:

On a properly prepared epoxy basecoat, the adhesion should exceed 300 psi @ elcometer (concrete failure, no delamination)

ABRASION RESISTANCE:

Taber abrasor CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 15-20 mg loss

FLEXIBILITY:

No cracks on a 1/8" mandrel

SHELF LIFE:

6 months in unopened containers.

DOT CLASSIFICATIONS:

Part A "CORROSIVE LIQUID N.O.S., 8, UN1760, PGII"
Part B " ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S., UN3082, 9, PGIII,"

CURE SCHEDULE (70°):

Pot life – 1 gallon volume (maximum time to apply).....1-2 hours

Tack free (dry to touch).....3-6 hours

Recoat or topcoat.....6-10 hours

Light foot traffic.....14-24 hours

Full cure (heavy traffic).....3-5 days

APPLICATION TEMPERATURE:

50-90 degrees F

CHEMICAL RESISTANCE:

REAGENT	RATING
acetic acid 5%	3
mek	2
gasoline	4
50% sodium hydroxide	4
10% sulfuric	4
10% hydrochloric acid	4
20% nitric acid	3
ethylene glycol	4

Rating key: 1 - not recommended, 2 - 2 hour term splash spill, 3 - 8 hour term splash spill, 4 - 72 hour immersion, 5 - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.

PRIMER:

Apply a suitable basecoat. For thin mil systems, we recommend NC-WBE in clear for clear NC-LOHS-HPU or in a color that matches the color pack for the

NC-LOHS-HPU when colored. For a high build color system, we recommend

NC-HBET in a matching color for the intermediate coat.

TOPCOAT:

We do not recommend multiple coats of this product or other topcoats.

LIMITATIONS:

*Color or gloss may be affected by humidity, temperatures, chemical exposure, application thickness, exposure to lighting such as sodium vapor lights.

*For best results use a high quality 3/8" nap roller.

*Slab on grade requires moisture barrier.

*Substrate temperature must be 5°F above dew point.

*All new concrete must be cured for at least 30 days.

*Physical properties are typical values and not specifications.

*Tire contact may cause staining and discoloration.

*Colors may vary from batch to batch, therefore, use only product from the same batches for an entire job.

* Do not use if relative humidity is below 25%

* Material has to be applied precisely at a 500 sq. ft. per gallon uniformly for

proper appearance and development of physical properties.

* The epoxy basecoat must be abraded/de-glossed for proper adhesion

LOHS-High Performance Urethane Mixing and Application Instructions

PRODUCT STORAGE: Store product at normal room temperature before using. Storage should be between 60 and 90 degree F.

SURFACE PREPARATION: Surface preparation will vary according to the type of complete system to be applied. For a one or two coat thin build system over concrete, (3-10 mils dry) we recommend either mechanical scarification or acid etching until a suitable profile is achieved. For a complete system build higher than 10 mils dry, we recommend a fine brush blast (shot blast). All dirt, oil, dust, foreign contaminants and laitance must be removed to assure a trouble free bond to the substrate. A test should be made to determine that the concrete is dry; this can be done by placing a 4' X 4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause disbonding. For applications directly over concrete, Testing should be performed to confirm a moisture vapor emission rate below 3 lb/24hr/1000 ft² per ASTM F1869. It is crucial that the epoxy basecoat is thoroughly sanded until the surface is de-glossed and appropriately and thoroughly scratched. It is recommended that a minimum 80 grit paper be used.

PRODUCT MIXING: This product has three components. The part A should be mixed with the part B thoroughly and then the part C should be added and mixed in well to insure a uniform mixture. The kits come prepackaged and should be used in their entirety and should not be broken down. If a color pack is used, it is recommended that the color pack be combined with the part A and part B prior to adding the part C aggregate and then mixed well. After the three (or four, if color packs are used) parts are combined, mix extremely well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. Avoid whipping air into the coating.

Improper mixing may result in product failure. Once the material is opened, it cannot be re-sealed for later use.

PRODUCT APPLICATION: Pour the mixed material into the application tray. Apply at the rate of 500 square feet per gallon in a uniform manner with a

3/8" nap roller. For uniform appearance, it is critical that the material is not applied above or below this application rate. Dip the roller in the coating and roll out excess material in the roller tray prior to the actual application to the substrate. Overlap subsequent passes being sure no excess material is applied when overlapping. Make sure the floor has just enough material to cover evenly in a thin application. Finally, re-roll the area in the opposite direction of the first pass applications to level and even the application. The final re-rolling for the entire floor should be in the same direction. Remix the material in the application tray to maintain a uniform mix throughout the application process.

If the appearance is not satisfactory, re-roll until the area is uniform in appearance. It is almost impossible to over-roll this material. The last step in the application process (wearing spiked shoes) is to pull the roller tool across the entire slab in one direction without applying any pressure and repeating this process by overlapping until the entire slab has been re-rolled. This will help blend in any roller and overlap marks.

PRODUCT APPLICATION (CONT'D): Maintain temperatures and humidity within the recommended ranges during the application and during the curing process. Make sure the substrate has a suitable epoxy primer that has been de-glossed (see surface preparation above) It is best to maintain a wet edge to avoid roller marks. Direct sunlight or high temperatures may cause visible roller marking during application. Too thick of an application may result in solvent entrapment and product failure. The Surface must be dry before the application of this product.

RECOAT OR TOPCOATING: Multiple coats of this product are not recommended without thoroughly evaluating the adhesion in conjunction with

a thorough deglossing. If you opt to recoat this product, you must first be sure that all of the solvents have evaporated from the coating during the curing process and properly de-gloss and roughen the surface (see surface preparation above). The information on the front side are reliable guidelines to follow. However, it is best to test the coating before recoating or topcoating. This can be done by pressing on the coating with your thumb to verify that no fingerprint impression is left. If no impression is created, then the surface preparation and recoat can be started. Always remember that colder temperatures will require more cure time for the product before recoating can commence. Before recoating or topcoating, check the coating to insure no contaminants exist. If a blush or contaminants are present on a previous coat, remove with a standard detergent cleaner and allow to thoroughly dry. When recoating this product with subsequent coats of the urethane, it is advisable to apply the recoat before 24-48 hours pass only after proper surface preparation has been completed.

CLEANUP: Use ketone solvents or other suitable cleaning solvent

FLOOR CLEANING: Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.

RESTRICTIONS: Restrict the use of the floor to light traffic, non-harsh chemicals and water until the coating is fully cured.

Warranty

Since no control is exercised over product use, The Nikka Corporation warrants that its products are manufactured free from defect and are consistent and within manufacturing tolerances on our data sheets. No other oral or written representation or statement of any kind, expressed or implied, now or hereafter made is authorized or warranted by The Nikka Corporation. This product is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular use. The Nikka Corporation shall have no liability for incidental or consequential damage, direct or indirect. Our liability is limited to price of or replacement of our product at our option. By accepting delivery of our product means that you have accepted the terms of The Nikka Corporation Warranty.

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