

# 2K ACRYLIC URETHANE W.B.®

## Series 8000

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### PRODUCT DESCRIPTION:

2K ACRYLIC URETHANE WB is a 2-component waterborne, low odour, environmentally friendly, high performance aliphatic urethane. It has outstanding properties such as non-yellowing, extremely fast curing and low VOC, for both exterior and interior applications. Systems for optional finishes.

### PRODUCT FEATURES:

- Water based acrylic urethane
- Coating for concrete, wood, and metal.
- Environmentally friendly, close to zero VOC, low odour .
- Extremely fast cure and very long pot life result in less down time. Dry to tack free and hard in less than 1 hour.
- Excellent gloss retention
- Excellent abrasion resistance.
- Comparable properties to solvent based 2K polyurethanes.
- Excellent exterior durability, non-yellowing, and UV resistance
- Broad application properties
- Very good chemical, solvent and water ponding resistance.

### TYPICAL USES:

- Ideal coating where VOC and odour is a prime concern.
- For exterior/interior walls and floors in commercial and general industrial environments, hospitals and schools.
- Wood furniture, kitchen cabinet coatings, and maintenance coatings.

- Very durable wear surface for sealing cementitious overlays, chemical stains and polymer concrete flooring.
- Retail, commercial and restaurant flooring.

### TECHNICAL DATA

<b>POT LIFE:</b>	4- 6 hours @ 21°C(70°F) (decreases at higher temperatures)
<b>PACKAGING:</b>	3L, 9L. and 18L Units.
<b>SHELF LIFE:</b>	6 months in unopened container @ min. 20°C(68°F).
<b>RESIN TYPE:</b>	2 component acrylic urethane
<b>COLOUR:</b>	Clear and colours
<b>SHEEN:</b>	Semi-Gloss, 75% @ 60° Satin, 30% @ 60°
<b>MIXING RATIO:</b>	8:1, Resin to Catalyst (by volume)
<b>PERCENT SOLIDS by VOLUME:</b>	Semi-Gloss-40% Satin-43%
<b>VOC, g/L:</b>	2.5 – 5
<b>MINIMUM FILM FORMATION TEMP.:</b>	15° C(59°F)
<b>THEORETICAL COVERAGE @ 7 mils WFT:</b>	229sq.ft./ US Gal.
<b>RECOMMENDED WFT:</b>	5 to 7 mils/coat(min. 2 coats)
<b>CURE TIME @23°C(73°F):</b>	Recoat-45 minutes Light Traffic-4 hrs Full Cure-7 days
<b>REDUCER &amp; CLEANUP:</b>	Clean Water
<b>TABER ABRASION:</b>	ASTM D4060 1000g load, 1000 cycles, CS-17 wheel: 25 mg loss

NOTE: The above data is solely based on lab testing done under strictly controlled conditions. Ambient temperature was used for all testing. No warranty can be given as to the accuracy of this information as it will depend upon conditions at actual project locations, which are beyond our control.

## SURFACE PREPARATION:

### New Concrete Preparation:

All surfaces to be coated must be clean, dry and free of all contaminants. New concrete must be cured a minimum of 28 days with no more than 3% moisture content. Any curing or hardening compounds, form oils, release agents or laitance must be removed by means of mechanical abrasion. Shot blasting or diamond grinding are the recommended methods. These two means of mechanical abrasion will clean the surface and open the pores of the concrete to allow maximum penetration of the primer. Ensure the methods of mechanical abrasion are dust-free.

### Existing Concrete Preparation:

Ensure all loose concrete is removed, using a scarifier, diamond grinder, bush hammer or other methods. Remove any contamination, including grease and oil using an industrial cleaner. (Consult your NPC representative for recommended cleaners) Prepare the entire floor by method of a shot blaster, or diamond grinder. Patch any uneven or damaged concrete using "NPC 100 Epoxal Patch" or consult your NPC representative for further instructions.

Existing coated surfaces must be intact and tightly bonded to substrate below. If stability of existing coating is in question, test a small section and check for lifting. Hard or glossy surfaces must be abraded to improve adhesion performance.

### Wood Preparation:

All wood surfaces to be coated must be clean, dry and free of all contaminants.

## PRIMING:

2K ACRYLIC URETHANE WB is a suitable primer for most applications over concrete and wood. If thicker build is required over concrete or cementitious substrates, we recommend EPOXAL 100 PRIMER or EPOXAL WB CLEAR PRIMER. Apply all of the aforementioned primers at a spread rate of 4-6 mils. If the spread rate is less than 4 mils, the substrate may not be properly sealed. If the spread rate is greater than 6 mils it increases the probability of bubbles caused by out gassing.

## MIXING:

*2K ACRYLIC URETHANE WB is always mixed at a ratio of 8 Parts A to 1 Part B by volume.* Always premix the Part A (resin) component of the mixture thoroughly. 2K ACRYLIC URETHANE WB is supplied in different quantities. All quantities of packaging can be mixed in the original container by adding the Part B into the Part A. Pour the Part B into the Part A slowly while mixing. *Always mix the two components for a full 5 minutes with a jiffy mixer.* *Allow the mixture to stand for 10 minutes before applying.* To reduce the viscosity of the material, mix 5% water (by volume) into the mixed material. The mixed product may be filtered using a 25 micron filter if necessary.

## APPLICATION:

- Step 1.* Mix the material according to instructions provided.
- Step 2.* Pour the mixed material into a paint tray.

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**Step 3.** Using a 15 mil nap, 9" paint roller, spread over the desired area. ***Each time the roller is saturated, the coverage on the floor should be no more than 11.5 sqft.***

**Step 4.** Spread the material, being cautious not to leave any ridges. These ridges will take longer to dry and may remain white in colour if they are very thick.

**Step 5.** 2K ACRYLIC URETHANE WB clear is milky white and blue in colour when it is applied to the floor. As it cures, it will clarify.

**Step 6.** Do not allow the fresh edge of the coating to dry. If it begins to clarify, it is curing. **Do not roll back into the material if it is clarifying.** This will cause a difference in appearance.

**Step 7.** Allow coating to cure.

**Step 8.** Repeat this process for the second and any further coats.

This product can also be applied using an air/airless sprayer. Proper respiratory protection is required when spraying this material.

***For a proper bond additional coats must be applied within 24 hours after the completion of the first coat, depending on temperature.*** If this window is surpassed, mechanical abrasion must be used to prepare the coating before any further coats.

NPC recommends a minimum of two coats, at a thickness of 7 mils WFT/ coat.

## CURING:

At a temperature of 23°C(73°F), 2K ACRYLIC URETHANE WB will be tack free within 45 minutes. It will support light traffic at 4 hours and will reach full cure and chemical resistance in 7 days.

Optimum temperature and relative humidity conditions are 16°C(61°F) -23°C(73°F), 40-70% R.H.O.

## LIMITATIONS:

- This product must be applied to a substrate with a minimum temperature of 15°C(59°F).
- This product is not recommended for areas that are exposed to severe thermal shock.
- Working time and cure times are very dependant on temperature.
- Maintain a constant temperature before and during application period, and until coating is cured.

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### CHEMICAL RESISTANCE

Ambient cure after 7 days (1 hour contact, 10 drops)

Acetic Acid Glacial	G	
Acetone	G	
Ammonia 28%		E
Coffee		E
Cola		E
Grape Juice		E
HCL 37%		G
Lipstick		E
Methyl Alcohol		G
Mustard (it fades)	E	
Nitric Acid 70%	N/R	
Nitric Acid 30%	E	
Orange Soda		E
Sodium Hydroxide 50%		E
Sulfuric Acid (conc)		N/R
Sulfuric Acid 50%	G	
Toluene		G
Water		E
Wine		E

**Rating References:** E-Excellent, G-Good (possible stain, no change in film condition), N/R-Not Recommended.