



PRODUCT TECHNICAL DATA SHEET



2K CRU WB (GLOSS OR MATTE)

Formerly named PETRA-THANE WB

HIGH PERFORMANCE TWO-COMPONENT POLYURETHANE

GENERAL PRODUCT DESCRIPTION

2K CRU WB is a two-component, low-VOC premium aliphatic water-based polyurethane. The product has 2 primary applications. First, it is used for the 2KGS system as an elite grind and seal system. Once concrete receives proper mechanical surface preparation (see Concrete Preparation), 2 coats can be applied.

Second, it is used as a finish coat over an epoxy top coat to enhance aesthetics by resisting discoloration/ yellowing, staining, and to help preserve a long term gloss or matte finish. This is especially important on decorative systems that use clear epoxy top coats (e.g., quarts, chips, and metallics.) the lighter the solid color, the more it is recommended.

This latest generation of polyurethane system provides excellent UV resistance with either a gloss or matte finish, and little to no solvent odor. This system boasts easy installation, long pot life, as well as great abrasion and chemical resistance. It's suitable for both indoor and outdoor uses.

ADVANTAGES

- No Solvent Smell
- Non-Yellowing
- V.O.C. Compliant SCAQMD
- Long Pot Life / Easy Application
- Chemical Resistant
- Seamless Flooring System
- Able to be Applied Over Damp Concrete
- Can be Applied Over 10 Day Old Concrete
- Available in Gloss or Matte Finish

APPLICATIONS

- Retail Floors
- Warehouses
- Garage Floors
- Pool Decks
- Hospitals & Schools
- Show Room Floors
- Aisle Ways & Halls
- Wall Coating
- Equipment Pads

PRODUCT DATA

Volumetric Ratio: 3 to 1

Application Temp:	65-90°F and 5°F above dew point
Solids:	51%
Thinning:	Not required
Working time on floor:	10-15 minutes
Cure Time:	10 hours (walking) 48 hours (traffic)
Critical recoat time:	18 hours
Shelf life:	12 months
USDA Food and Beverage:	Meets requirements

Cure time, pot life, and working time are based on a slab temperature of 70-75 F°, and will change accordingly as airflow and temperature changes. Thinner applications increase cure times, while thicker applications decrease it.

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
V.O.C.	< 50 g/l	ASTM D 2369-81
Gloss 60'	90	ASTM D 823
Flexibility	Pass	ASTM D 522
Bond to Concrete	350 psi	ASTM D 4541
Taber Abrasion	Loss/1000 Cycles = 45 mg	ASTM D 4060 CS 17 Wheels
Volume Solids	51 %	ASTM D 2697
Pencil Hardness	3H	ASTM D 3363

CHEMICAL RESISTANCE

Diesel Fuel	NE
Coolant	NE
Brake Fluid	SD
Transmission Fluid	SD
Power Steering Fluid	SD
Ammonia 5%	NE
Mineral Spirits	NE
Nitric Acid 5%	NE
Sodium Hydroxide 5%	NE

Note: The above guide is based on 24 hour exposure of the listed chemical at 72 degrees F (22 degrees C)

Key: NE = No Effect, SD = Slight Dulling, Above chart serves as a guideline only. Testing samples can be furnished upon request.

COVERAGE

When used as a finish coat over an existing coating, estimate coverage between 350-500 Sq Ft per gallon. When used for the 2K Grind & Seal system, apply the first coat 300-350 Sq Ft/gal. Apply the second coat at 400-500 Sq Ft/gal. Always apply in thin coats. As with most water-based products, thick coats can result in trapped water in the film and thick areas will remain white. Do not allow puddling. Brush out any puddled material that pools in cracks, divots or low spots. For thicker films, simply apply additional thin coats.

SURFACE PREPARATION

When used as a finish coat over an existing coating, lightly use a sanding screen to create a smooth surface. Remove all dust prior to application (e.g., tack rag).

When used in the 2K Grind & System, before the coating is applied, the concrete must be:

- Clean – Contaminants removed
- Profiled – Surface mechanically prepared
- Sound – Cracks repaired

Mechanical methods are required for preparing concrete prior to coating application. The concrete profile should be a approximately CSP 2 surface profile. Typically, a 30/40, 50/60 or 60/80 level, in either one or two passes is recommended, depending on the condition of the concrete (strength, porosity, flatness, etc.), equipment used skill/method of the installer, and desired finish from the end user. Always, provide a mockup sample prior to installation as the grinding scratches may vary with different substrates and their porosity.

MIXING

The mix ratio of the 2K CRU WB is 3 to 1. That is, 3 parts of A (resin), to 1 Part B (isocyanate). Mix the following with a drill and jiffy mixer. Use low speed, 300 rpm or lower to avoid air entrapment.

1. Pour the Part A into a mixing bucket. Add the Part B (in the correct 3:1 ratio), and mix 60-90 seconds until uniform, scraping the sides to insure a uniform mix. Always use clean mixing buckets to prevent contamination of the product.
2. As is the case with all water-based polymers, any mixed resin left in the bucket may take several days to harden with the lid off. It is recommended to roll out leftover resin onto a substrate such as cardboard in order to remove leftover, wet resin from the bucket.
3. Like most waterbased polymers, the 2K CRU WB has a very long pot life. The mixed product will remain in a liquid form for many hours with exposure to air before slowly turning to a gel form. Leftover mixed material should be rolled out onto a substrate such as cardboard in multiple coats in order for product to properly harden for proper disposal.

APPLICATION PROCESS

Apply the 2K CRU WB at the correct coverage rate, whether used to go over an epoxy coating or as a 2K Grind & Seal system. (See Coverage section.) Using a 3/8" non-shedding roller, quickly roll out the floor. Immediately after, cross roll the coating in the opposite direction. Additional coats will increase thickness and durability.

When applying the primer coat for the 2K Grind & Seal system, the 2K CRU WB will provide a darker finish. The 2K CRU WB primer coat can be substituted with the Epoxy WB Fast. This will provide a lighter finish and faster cure time in between coats. To achieve a slip-resistant finish, backroll aluminum oxide (80-120 grit) into the system. Provide a mockup sample as the texture, aggregate & amount used, could make the floor too difficult to clean & maintain.

COLOR SELECTION

2K CRU WB is available in clear.

PACKAGING

2K CRU WB is available in the following kit sizes:

	Part A	Part B
2 Gallon Kit	1.5 gal.	.5 gal.
4 Gallon Kit	3 gal.	1 gal.
20 Gallon Kit	15 gal.	5 gal.

CLEANUP

2K CRU WB while in a liquid state may be cleaned up with water and degreaser. Otherwise a strong solvent may be required while 2K CRU WB is setting up. Refer to the ONYX Maintenance and Cleaning document for further instructions.

WARRANTY

ONYX products are warranted for 1 year after date of manufacture. Please refer to the ONYX Concrete Coating's Limited Material Warranty for additional clarification. Refer to the ONYX General Product Limitation Guidelines.

SAFETY

Consult the 2K CRU WB safety data sheet. Avoid contact of the 2K CRU WB with skin. Some individuals may be more sensitive to polyurethane products. Always wear protective eyewear, clothing, and gloves. Safety always comes first.

MAINTENANCE

Refer to the ONYX Maintenance and Cleaning Guidelines.

PRODUCT LIMITATIONS

Always read the ONYX PRODUCT LIMITATION GUIDELINES prior to installation.