



PRODUCT TECHNICAL DATA SHEET

2K CRU WB (GLOSS OR MATTE)

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 preserving a long term gloss or matte finish. This is especially important on decorative systems that use clear epoxy top coats (e.g., quartz, 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
- Easy to Clean and Maintain
- Able to be Applied Over Damp Concrete
- Slip Resistant Surface with Aluminum Oxide
- Available in Gloss or Matte Finish

APPLICATIONS

- Entertainment Venues
- Warehouses & Aisle Ways
- Automotive & Garages
- Hospitals & Schools
- Retail & Show Rooms
- Offices
- Manufacturing/Production
- Animal Care
- Residential
- Dining & Break Rooms

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:	30-40 minutes
Cure Time:	18 hours (walking) 48 hours (traffic)
Critical recoat time:	24 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. Wait 28 days before applying over new concrete.

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
V.O.C.	< 50 g/l	ASTM D 2369-81
Matte 60 °	90	ASTM D 823
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
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 / gal. When used for the 2K Grind & Seal System, apply the first coat 300-400 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, microfiber). Stay within the critical recoat window.

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 approximately a CSP 2, scratch free surface. 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, hardness, flatness, etc.), size/weight of 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 by volume. That is, 3 parts of A (resin), to 1 Part B (isocyanate). Mix Part A and Part B together at medium speed for 2 minutes under mechanical agitation with a jiffy paint mixer.

Pour the Part A into a mixing bucket. Add the Part B (in the correct 3:1 ratio), and mix 2 minutes until uniform, scraping the sides to insure a uniform mix. Always use clean mixing buckets to prevent contamination of the product.

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. 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 cover, quickly rollout the floor. Immediately after, cross roll the coating in the opposite direction avoiding roller marks. 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. Epoxy WB Fast must be used as the primer coat before applying 2K CRU WB over a cementitious overlayment/topping. To achieve a slip-resistant finish, lightly broadcast aluminum oxide (80-120 grit) into the system and then backroll. It is always best to provide a mockup sample to determine the needs of the coefficient of friction as outlined by ANSI A137.1. Use the mock up to ensure the size of aggregate and amount used does not make the floor too difficult to clean and maintain.

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.

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 Product Limitation Guidelines for further information.

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.