

TECHNICAL DATA SHEET | WB ULTIMATE TOP COAT

DESCRIPTION: Polytek's Ultimate Top Coat is a two-component, high solids, water-based, aliphatic polyurethane. The excellent UV resistant, mar-resistant, chemical resistant nature of this product will cause it to outperform most other types of sealers or topcoats without the unwanted smell of solvents. Ultimate Top Coat comes in both a high-gloss and satin-gloss finish.

USES: Polytek's Ultimate Top Coat is designed for professional use only and is specified as the finish coat for use in moderate to severe chemical environments or in medium-heavy traffic areas. This UV-resistant coating can be used in both indoor and outdoor applications. Apply Ultimate Top Coat as a coating over Polytek's epoxy floor coatings. Ultimate Top Coat is also used as a sealer on a variety of other substrates such as decorative concrete overlays and acid-stained concrete flooring. This product can be used for Garage Floors, Decorative Floors, Restaurant Floors, Food Processing Facilities, and more.

ADVANTAGES:

- SCAQMD VOC Compliant (VOC <50 g/l)
- Chemical Resistant
- Powerful Color and Gloss Retention
- Impact and Abrasion Resistant
- No Solvent Smell
- Water-based Formula

Physical Properties	
Mix Ratio	1:2
Shore D Hardness	N/A
Color	Clear
Mixed Viscosity (cps)	800 cps
Coverage Per Gallon	530-800 sq. ft/gal (Single Layer Coating)
Work Time	60 minutes
Recoat Time	6-12 hours
Dry Time	4-6 hours
Light Foot Traffic	18 hours
Light Vehicle Traffic	72 hours
Full Cure	3-7 days
VOCs	<50 g/l
Tensile Strength	3,980psi

*All values measured after 24 hours at 73°F/23°C.

COVERAGE: Coverage will vary depending on the condition of the surface and desired thickness.

	Single Layer Coating
Per Gallon	530-800 ft ²
24 oz	100-150 ft ²
1.5 gal	800-1,200 ft ²

***Ultimate Topcoat is intended to be used as a high-strength topcoat for epoxy floors. The values above reflect applying the coating over metallic floors.*

Sq Ft/Gal to Mil Thickness	Sq Ft/Gal to Oz Per Sq Ft
100 sq ft/gal = 16 mil	1.28 oz per sq ft
128 sq ft/gal = 12.5 mil	1 oz per sq ft
160 sq ft = 10 mil	0.8 oz per sq ft
200 sq ft/gal = 8 mil	0.64 oz per sq ft
266 sq ft/gal = 6 mil	0.48 oz per sq ft
300 sq ft/gal = 5.3 mil	0.43 oz per sq ft

INSPECTION: Concrete must be clean, dry, and free of grease, paint, oil, dust, curing agents, or any foreign material that will prevent proper adhesion. The concrete should be at least 2500 psi and feel like 30-grit sandpaper. The concrete should be porous and be able to absorb water. A minimum of 28 days cured is required on all concrete. Relative humidity in the concrete floor slab should be below 80% (per ASTM F-2170). All moisture should be kept away a min. of 72hrs before application and a min. of 72 hours after installation. This includes high humidity, sprinklers, rain, fog, dew, etc. Make sure the relative humidity of the air is < 70% to ensure an even gloss finish.

Before starting flooring work, test the existing concrete slab to make sure there is no efflorescence or high levels of alkalinity. Alkalinity refers to a high pH reading which means the floor is not neutral. A high alkaline environment can cause salts to creep up through the cement called efflorescence. These salts tend to prevent or destroy the bonding of coatings to the concrete. The most common form of testing is the use of a wide-range pH paper or tape. Make sure the floor's pH reading ranges between 5-9 to ensure adhesion. The testing of concrete for alkalinity can show the amount of alkalinity only at the time the test is run, and cannot be used to predict long-term conditions.

Calcium chloride tests should be conducted to determine if the concrete is sufficiently dry for a floor coating installation. The calcium chloride tests should be conducted in accordance with the latest edition of ASTM F 1869, Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. When running a calcium chloride test, it is important to remove any grease, oil, curing agents, etc. so accurate readings can be obtained. A rate of 2.5lbs/1000 ft²/24hr period or less is an acceptable amount of vapor pressure to install Ultimate Top Coat directly over concrete. If the reading is any higher, please consult Polytek for further instructions.

Failing to adhere to these strict guidelines can result in product delamination, discoloration, blistering, or altogether failure of the coating system. Testing is the responsibility of the applicator. Polytek bears no responsibility for failures due to any of the above conditions.

SURFACE PREPARATION:

Over Concrete Surfaces: Shotblasting or diamond grinding is the preferred method for preparing the concrete. Proper preparation should achieve a clean, porous, and uniform surface that feels like 50 grit sandpaper that will allow the product will soak in and properly bond.

As a Sealer Over Concrete: When applying Ultimate Top Coat directly over porous concrete as a clear sealer, the surface may be lightly abraded. Make sure no contaminants or prior sealers are present.

Over Existing Polytek Epoxy: Apply directly over the existing coat of Ultimate Top Coat within 18 hours of application of the previous coating. When applying over 100% solids epoxy or recoating over existing Ultimate Top Coat that has been cured for longer than 24 hours, sand the surface with 100-150 grit sandpaper, remove debris, and wipe with acetone just before new application.

MIXING INFORMATION:

As a Coating over Concrete, Epoxy, or CRU: Before application, Side B Resin must be mixed separately before combining material. Add 1 part of the A-Side to 2 parts of the B-Side while mixing, using a mechanical mixer (Jiffy Mixer) at low to medium speeds. For proper leveling purposes, add 8-12 fl. oz water to 1½ gallon mix. Mix until a homogeneous mixture and streak-free appearance is attained (approximately 3 minutes). Use care to scrape the sides of the container to ensure that no unmixed material remains.

As a Sealer Over Concrete: When applying as a clear sealer directly on acrylic cement or acid-stained concrete, it is recommended to thin the CRU with a maximum total of 10% water (20 oz) per 1½ gallon kit. Thinning will aid in penetration, help avoid puddles and help avoid bubbles and unevenness. Make sure to properly neutralize the floor if acid stained. If a second coat is to be applied, dilute mixed product with up to 5% water (10 oz).

APPLICATION: The Ultimate Top Coat material may be squeegeed, rolled, or brushed. Apply product within 24 hours after the previous coating is applied. Immediately after mixing, spread a strip of the batch onto the surface along the edges where it will be cut in using a brush or trowel. Leave remaining material in the bucket and spread evenly using a 3/8" non-shedding nap roller cover beginning near the cut-in area. Apply quickly and avoid over rolling, as the product will begin to "tack-up" as it begins to cure. Re-coat if needed within 18 hours of application to ensure adhesion. If a delay occurs, it is recommended that the surface be sanded and wiped clean with acetone before reapplication.

DRYING TIME: You may re-coat as soon as the surface is completely dry to touch or in about 6-12 hours (but not later than 18 hours). If re-coat time has been exceeded, lightly sand the surface and wipe clean with acetone before the next application. Light foot traffic may be permitted in 18 hours, full foot traffic in 36 hours, light vehicle traffic in 72 hours, and heavy traffic in 3-7 days. All times are based on an average temperature of 70 degrees and 50% humidity. Cooler temperatures will increase drying time.

MAINTENANCE: Cleaning the CRU is best done by mopping the surface with mild soap and water or a mild detergent. For best appearance, Polytek recommends resealing the surface every 3-4 years. Reseal by lightly sanding existing coating, cleaning surface, and applying over the dry surface using the above application specifications

LIMITATIONS:

- Do not apply at any temperature below 50°F or above 95°F.
- Do not apply unless the temperature is 5° above the dew point or if rain is expected within 24 hours.
- Do not apply on damp or moist surfaces as the product will whiten and may cause delamination.
- Apply only if the relative humidity is <70% to ensure an even gloss finish.
- Opened material must be used within 2 days.
- 1 gallon must cover at least 275 sq. ft to properly cure.
- Please read the MSDS sheet before use.
- Shelf Life of this material is 1 year from the date of manufacture (see batch number for manufactured date).
- Polytek recommends the use of angular slip-resistant aggregate in all coatings or floor systems that may be exposed to wet, oily, or greasy conditions. It is the contractor and end user's responsibility to provide a flooring system that meets current safety standards.

CLEAN UP: Uncured material can be removed with a solvent. Cured material can only be removed mechanically. All empty containers must be disposed of according to local, state, and federal regulations.

DISCLAIMER: The information contained herein is considered accurate; however, Polytek® Development Corp. makes no warranty regarding its accuracy. The user must determine the suitability of the product for the intended use and accepts all risk and liability associated with that use. For further details, review our standard Terms & Conditions of Sale.



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