

Revision Date: 3/2024

# **Purify Top Coat**

## **Description:**

Terroxy Purify Top Coat product is a one-component moisture-cured aliphatic polyurethane top coat. This system is odorless, contains no VOC's or HAP's, and is a UV light stable polyurethane that won't chalk or turn yellow with exposure to sunlight. Properties include excellent chemical resistance against acids, bases, oils, and organic solvents, and higher wear resistance than polyaspartic, solvent-based urethane, and epoxy coatings. This polyurethane develops a hard, wear-resistant, flexible film that can be used as a clear or pigmented top-coat. A high gloss, satin, and matte finish is available.

### **Product Benefits:**

- Excellent chemical and stain resistance
- Excellent UV stability
- Impact and abrasion resistant
- High gloss, Satin, Matte finish
- Durable and easy to clean
- Zero V.O.C. Content

# Typical Applications:

- Interior industrial uses with heavy traffic
- Kitchens, Restaurants & Cafeterias
- Chemical Processing Plants
- Aircraft Hangers
- Locker rooms and restrooms
- Clean rooms & laboratories
- Classrooms & auditoriums

# Coverage:

Terroxy Purify Top Coat can be applied to a variety of substrates given that the surface is properly prepared. Typical coverage is 400 ft<sup>2</sup> per blended gallon over primed substrate (4 mils). Coverage may very depending on the condition of any non primed surface. Recommended primer: Terroxy UV Clear Epoxy

If applying a second coat of Terroxy Purify Top Coat, the re-coat window is 14-20 hours after initial coat. If beyond the 20 hours, you must abrade the first coat using 36 grit paper.

### **Substrate Preparation:**

Terroxy Purify Top Coat can be applied to a variety of substrates given that the surface is properly prepared. Preparation of surfaces other than concrete will depend on the type of substrate.

If applying over an existing coating, thoroughly sand the coating with 120-320 grit paper and clean to ensure a strong bond between coats. After sanding, vacuum thoroughly to remove any dust or dirt. Do not use water to clean a floor prior to application. If applying over acid-stained concrete, be sure concrete is clean and dry. Excess moisture will cause bubbles to form in the final film. Follow acid stain manufacturer procedure for cleaning and neutralization before applying Purify Top Coat topcoat. If applying over bare concrete, the concrete must be mechanically ground or shot-blast to a profile resembling ICRI-CSP2-3. The concrete must be at least 28 days old and dry. See "Limitations" section for acceptable slab moisture content. A primer application using Terroxy UV Clear Epoxy is recommended before applying Purify Top Coat.

For specific preparation guidelines contact your T&M representative.

# <u>Installation Instructions</u>

### **Application:**

Premix Terroxy Purify Top Coat on medium agitation for at least 60 seconds, or a uniform color. Application thickness is a maximum of 4 mils wet. Thicker films will cause bubbles to appear or foaming. Typical application thickness is 3-4 mils wet, which yields 3-4 mils DFT. Use a non-shedding epoxy/urethane grade high-density knit roller with 3/16"-1/4" nap. Larger nap rollers may cause bubbles in the film. If using a squeegee, pull the material to a very thin film and back-roll using the specified roller. Do not leave puddles of material on the surface. Coverage rates vary based on substrate, see below. Use Acetone or MEK to clean tools. Re-coat time is 12-20 hours after initial coat.

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# **Application:**

If using a color pack or matte additive, use one 16 ounce container per gallon of product. Add the pack to the material and mix at low-medium speed for 60 seconds or until uniform using a clean, dry mixing blade. Follow application instructions above. This product is sensitive to moisture. Keep containers closed as much as possible during application. Once a color pack or matte additive is introduced into the Purify, the material must be used within the working time specification.

#### Limitation:

IMPORTANT: This product is sensitive to moisture, alcohols, and liquid epoxy materials. Contamination with alcohols such as isopropyl alcohol (IPA), benzyl alcohol will cause product failure, foam, and excessive heat while mixing and applying. Contamination with liquid epoxy materials will also cause excessive heat and product failure. Do not re-use previously opened containers. Once the container is opened, it is exposed to moisture in the air, and starts to chemically react. It is not recommended this product be transferred to another container before mixing.

This product is best applied at a temperature range of 50F to 85F, with humidity at 40% to 60%. Purify Top Coat is sensitive to excess substrate moisture content. The substrate moisture vapor emission rate must not exceed 3 lbs./1000 sq.ft. over a 24 hour period as tested using the calcium chloride test, ASTM F1869. If using a moisture testing meter, ASTM F2170, the moisture reading must not exceed 75%. If over 75% RH or over 3% per 1000 sf. in a 24 hour period apply IC Moisture Guard per T&M's written instructions. Maximum film thickness per application is 4 mils. Do not allow material to puddle.

#### Cure Time:

Allow to cure 24 Hours at 75°F (23.8°C) surface temperature before opening to traffic.

### **Technical Data:**

Property	Method	Results
Abrasion Resistance	ASTM D-4060 C-S17 Wheel 1000 Cycles	9 mg loss
Hardness	Pencil Hardness	4H +
Adhesion	ACI 503R / ASTM C-1583	490 psi (100% concrete failure) (2.07 MPa)
Tensile Strength	ASTM D-2370	427psi (40.0% Elongation)
Impact Resistance	MIL-D-3134J	Direct, inch pound greater than 160, passes; Reverse, inch pound greater than 160, passes
Chemical Resistance	ASTM D-1308	No deleterious effects when exposed to:  • Distilled Water • Salt Water • 20W Motor Oil, Gasoline, Diesel Fuel • Brake Fluid, Anit-Freeze, Hydraulic Fluid, Brake Cleaner • IPA, Acetone, MEK, Xylene, Aniline • Skydrol, Jef Fuel • 5% Acetic Acid, 25% Acetic Acid • 5% Ammonium Hydroxide • 10% Hydrochloric Acid, 25% Hydrochloric Acid • 5% Tri-sodium Phosphate • 10% Hydrogen Peroxide • 50% Citric Acid • 10% Sulfuric Acid, 25% Sulfuric Acid • 10% Sodium Hydroxide • Mustard, Ketchup, Red Wine, Alcohol • Urine, Blood • Vinegar, Iodine, Household Bleach  Limited Exposure Recommended (Occasional spills, frequent Cleaning): • 10% Nitric Acid (slight stain) • 85% Phosphoric Acid • Fatty Acids • 50% Sodium Hydroxide

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### Clean Up

Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fire and health precautions when handling or storing solvents

#### Maintenance:

After completing the application of Terroxy Purify Top Coat, the installer should provide the owner with proper maintenance instructions. If the floors become slippery due to animal fats, oil, grease, soap or other topical residue, promptly remove contaminants and rinse thoroughly.

Terroxy Purify Top Coat is easily cleaned with neutral pH Balance Cleaners or detergents. Routine hand scrubbing is recommended for all surfaces having a slip resistant texture.

#### **Technical Service:**

Terrazzo & Marble Supply Companies, distributor of Terroxy Resin Systems, provides services and consultations on material selection, specifications and troubleshooting concerning proper thin-set epoxy terrazzo installation. Contact our **Terrazzo Sales Desk at 800.7.MARBLE** or **T&M Technical Department at 708.385.6633** for questions or assistance.

#### **Precautions:**

Refer to cautionary information printed on the product container. For medical emergencies, contact Chemtrec, the Chemical Emergency Transportation Center, at 800.424.9300.

### Warranty:

Terrazzo & Marble Supply Companies warrants for a period of one (1) year that Terroxy Purify Top Coat will be free of manufacturing defects and will conform to published specification when handled, stored, mixed and applied in accordance to recommendations of Terrazzo & Marble. If Terroxy Purify Top Coat fails to meet this warranty, the liability of Terrazzo & Marble will be limited to replacement of any non- conforming Terroxy Purify Top Coat only if notice of such non-conformity is given to Terrazzo & Marble within one (1) year from the delivery of materials. Terrazzo & Marble may, according to its discretion, refund the price received by Terrazzo & Marble in lieu of replacing the Terroxy Purify Top Coat. No customer, distributor or representative of Terrazzo & Marble is authorized to change or modify the published specification of this warranty in any way. No one is authorized to make oral warranties on behalf of Terrazzo & Marble. In order to obtain replacement or refund, the customer must provide written notice containing full details of the nonconformity. Terrazzo & Marble reserves the right to inspect the non-conforming Terroxy Purify Top Coat prior to replacement. Except for the expressed warranty stated above, there is no other warranties, expressed or implied, including without limitation, implied warranty of merchantability or fitness for purpose. Terrazzo & Marble's obligations shall not extend beyond the obligations expressly undertaken above and Terrazzo & Marble shall have no liability or responsibility to the purchaser or any third party for any loss, cost, expense, damage or liability, whether direct or indirect, or for incidental or consequential damages.

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