

# ULTRA-GLAZE 475

A SINGLE-COMPONENT, 86% SOLIDS, SOLVENT-BASED, ALIPHATIC, POLYURETHANE TOPCOAT WHICH IS DURABLE & CHEMICAL RESISTANT

**ULTRA-SEAL 475** is a high-gloss, 86% solids, single-component, solvent-based, moisture cured polyurethane topcoat which yields a highly light reflective, smooth finish with U.V. stability and good gloss retention. Ultra-Glaze 475 also provides excellent abrasion, impact and chemical resistance.

**Please note that Ultra-Glaze 475 is strictly a finish topcoat product intended for no more than 5 mils and will blister is applied too thick.**

## TYPICAL USES

- Industrial
- Warehouses
- Retail
- Aircraft hangars
- Showrooms
- Schools
- Hospitals
- Cafeterias
- Restrooms
- Food processing plants
- Institutional facilities

## ADVANTAGES

- Single component
- Good gloss retention and light reflectivity
- Long working time
- Abrasion & impact resistant
- Resistant to hot tire pickup
- Excellent chemical & stain resistance
- U.V. stable
- VOC compliant in most regions (<99 g/L)
- Meets FDA & USDA standards for flooring

## PACKAGING

1 gallon jug (3.79 liters)  
5 gallon pail (18.93 liters)

## SURFACE PREPARATION

Thoroughly sand to degloss surface, vacuum then acetone tack rag clean prior to application. Do not use alcohol to clean substrate due to risk of moisture being drawn to the substrate surface from air. Detergent scrub with Umaco Ultra-Clean and rinse with clean, potable water to remove surface dirt, light surface grease/oil and contaminants prior to mechanical preparation. Please note that methyl methacrylate (MMA) is not a compatible substrate.

## New Floor Coating Systems

Ensure that the previous layer has cured enough to receive another layer and shows no indication of blushing. Correct any surface imperfections in the previous layer prior to top-coating. Sand to degloss the of previous layer to remove surface imperfections and to achieve ideal Intercoat adhesion between layers.

## Existing Floor Coating Systems

Adhesion to any existing coating system is only as good as the adhesion the existing coating system has to its substrate. Always test to determine the suitability of an existing substrate. To achieve the best looking end result and optimal adhesion, allow the primer to dry then degloss the surface of the prior layer using an orbital floor machine with 100 to 120 grit sanding screens or sandpaper leaving a uniformly dull finish with no remaining shiny areas then vacuum and solvent tack rag using acetone prior to topcoating.

## Concrete

Not intended for use directly over bare concrete unless Umaco Ultra-Prime 100 is first applied. If moisture is present in the concrete, Umaco Ultra-Prime MVB must be used (in place of Umaco Ultra Prime-100) prior to application. Refer to Umaco Ultra-Prime MVB data sheet for full instructions and limitations.

## SUBSTRATE TEMPERATURE

55°(12.7°C) to 95°F (35°C) with 30% to 75% humidity. Do not apply below 25% ambient humidity.

## MIXING

Stir thoroughly with a clean paint stick for 30 seconds before using.

## Optional Non-Slip Additive

Where additional slip resistance is required, blend 3.5 ounces of Umaco Ultra-Grip per each gallon used for the topcoat.

## APPLICATION

Pour Ultra-Glaze 475 into a high quality paint tray. Then dip a 3/8" or 1/4" nap roller into the Ultra-Glaze 475 and apply. Do not pour directly onto the floor. Apply a thin layer evenly (approximately 4 mils) avoiding runs, sags or puddles. Do not over-brush or over-roll since this may cause air bubbles to form. Always work to a wet edge. Overlapping wet on dry will cause finish variations.

## COVERAGE

Ultra-Glaze 475 is intended for thin, topcoats only. Apply at a rate of 375-425 ft<sup>2</sup> per gallon (approximately 4 mils) in a single layer to avoid fogging, orange peel or bubbles in the film.

## CLEANUP

Clean up mixing station, tools and equipment as required using acetone which is a VOC exempt solvent. Observe all legal, health and safety precautions when handling or storing solvents and materials particularly in confined spaces.

## STORAGE

Umaco Ultra-Glaze 475 has a shelf life of six (6) months from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 55-95°F (12.7°C-35°C).



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## **DISPOSAL**

Contact your local environmental regulatory agency for guidance on disposal of unused material. Do not pour down a drain or storm sewer.

## **LIMITATIONS**

- Primer or coating is required prior to applying Ultra-Glaze 475
- Not recommended for applications directly over bare concrete
- For industrial and wheeled traffic/ forklift traffic conditions, a minimum of a ICRI CSP 3 profile is required for mechanical preparation
- Does not block ultra-violet light radiation when applied over a non UV stable product such as epoxy
- Not water clear, may discolor underlying layer
- Foaming possible when applied thicker than 4 mils or when applied over a hot substrate
- Do not apply in direct sunlight
- Turn off radiant in floor heating a minimum of one hour prior to and 24 hours after application
- Do not install coatings when the dew point is within 5° of the temperature
- Application not recommended above 80% humidity at time of install
- Do not apply when ambient humidity is expected to be below 30% within the first 5 hours of cure to avoid surface defects

## **MAINTENANCE**

For maximum life expectancy, routinely sweep and wash floors with appropriate cleaners and detergents such Umaco Ultra-Clean. All chemicals or abrasive grit should be removed as soon as possible.

<b>TYPICAL CHEMICAL &amp; STAIN RESISTANCE</b>		
<i>Covered Spot Test [ASTM D1308] - 3 mil film after 7 day cure: E - Excellent; G - Good (slight sign of exposure/stains, coating recovers); D - Discolored / Stain; NR - Not Recommended (Permanent Damage)</i>		
<b>24 hour Exposure</b>		
<b>ACIDS</b>	<b>GLOSS</b>	<b>w/ A/O 325</b>
Acetic Acid 25% (Vinegar)	E	E
Citric Acid 10%	E	E
Lactic Acid (Milk)	D	D
Phosphoric Acid 85%	D	D
Sulfuric Acid 25% (Battery Acid)	D	G
Sulfuric Acid 98%	NR	NR
Hydrochloric Acid 32% (Muriatic)	E	E
Nitric Acid 50%	NR	NR
<b>BASES</b>		
Ammonium Hydroxide 10%	E	E
EBGE	E	E
Sodium Chloride 20%	E	E
Sodium Hydroxide 50%	E	E
Sodium Hypochlorite (Bleach)	E	E
Trisodium Phosphate 10%	E	E
<b>ALCOHOLS</b>		
Ethylene Glycol (Antifreeze)	E	E
Hand Sanitizer	E	E
Isopropyl Alcohol 91%	E	E
Methanol	E	E
<b>SOLVENTS</b>		
Acetone	E	E
d-Limonene	E	E
MEK	E	E
Methylene Chloride	E	E
Mineral Spirits	E	E
PGMEA	E	E
<b>HYDROCARBONS</b>		
Brake Fluid	E	E
Transmission Fluid	E	E
Motor Oil	E	E
Gasoline	E	E
Kerosene	E	E
Hydraulic Fluid	E	E
Skydrol® - LD-4	E	E
<b>MISCELLANEOUS</b>		
Coffee	E	E
Coke®	E	E
Dish Detergent (Dawn®)	E	E
Hydrogen Peroxide 3%	E	E
Ketchup	E	E
Monster Energy® Drink	E	E
Mustard	E	E
Povidone-iodine (BETADINE®)	E	E
Tide® 1%	E	E
Windex® (Ammonia Based)	E	E
Wine - Red	E	E

## CURE TIMES @ 50% HUMIDITY

	72°F	90°F
Pot Life	Ready to use	Ready to use
Working Time	2 to 2-1/2 hours	1 hour
Tack Free	3-1/2 hours to 4 hours	2-1/2 hours
Recoat Window	N/A (sand prior to recoat)	N/A (sand prior to recoat)
Foot Traffic	24 hours	18 hours
Heavy Traffic (forklift)	36 hours	24 hours
Full Chemical Resistance	7 to 14 days	6 to 12 days

## CURED COATING PROPERTIES (DRY FILM)

PROPERTY	TEST METHOD	RESULTS
Abrasion Resistance (mg/loss Taber Abraser)	ASTM D4060	23 mg loss (gloss)
Hardness (Pencil)	ASTM D3363	2H
Adhesion to Steel (Pull Strength, psi (MPa))	ASTM D4541	2,248 psi (15.5 MPa)
Adhesion to Concrete	ASTM D4541	Concrete Fails
Conical Mandrel (Resistance to Cracking)	ASTM D522	Pass
Water Absorption (24 Hour Immersion Test)	ASTM C413	<0.02%
Gloss (60°)	ASTM D1455	± 85 to 95 (gloss)
Viscosity @ 77°F	ASTM D2196	820 cP
Volume Solids (Clear)	ASTM D2196	86%
VOC's	ASTM D3960	< 99 g/L (clear)

### **WARNING**

Contains solvent. Material is flammable. Extinguish all flames, pilot light and electric motors until all vapors are gone and the coating is hard. Keep away from sparks, heat and open flame. Use adequate ventilation when mixing, applying and curing. Do not spray. Product may emit harmful solvent and isocyanate vapors when spray applied which can cause respiratory irritation. Individuals with chronic lung or breathing problems or negative reaction to isocyanates should not use this product. Before using, read the Safety Data Sheet and follow all precautions to prevent bodily harm.  
24 Hour Emergency Medical/Spill Information (Chemtrec): 800-424-9300  
**KEEP OUT OF THE REACH OF CHILDREN.**

**WARNING!** If you scrape, sand or remove old paint, you may release lead dust or fumes. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST OR FUMES CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.**

Before you start, find out how to protect yourself and your family by contacting the USEPA National Lead Information Hotline at 1-800-424-LEAD or log onto [www.epa.gov/lead](http://www.epa.gov/lead). Wear a properly fitted respirator and prevent skin contact to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Follow these instructions to control exposure to other hazardous substances that may be released during surface preparation.

For technical assistance call **978-453-8881.**

[www.umaco.com](http://www.umaco.com)

### **LIMITED WARRANTY**

*The manufacturer guarantees its products to be free of defects and the extent of its liability is limited to the purchase price of the materials only, if proved to be defective. Improper mixing, incorrect application or other factors beyond the control of the manufacturer or its dealers may produce unsatisfactory results and cannot be held to be the manufacturers or its dealers responsibility. There are no other guarantees either expressed or implied. (2023)*

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