

ULTRA-PRIME 100

A TWO-COMPONENT, WATER-BASED, EPOXY PRIMER & COATING WHICH EXHIBITS EXCELLENT PENETRATION, CHEMICAL & ABRASION RESISTANCE

ULTRA-PRIME 100 is a two-component, water-based epoxy coating that exhibits excellent substrate penetration, superb chemical and abrasion resistance. Available in Clear or in a variety of colors

USES & ADVANTAGES

- Durable coating when applied over concrete surfaces
- May be used as a primer over concrete surfaces prior to applying epoxy or urethane topcoats
- Reduces pinholes, fish-eyes, craters & outgassing of topcoats
- Low odor
- Excellent adhesion & penetration
- Super chemical resistance
- Excellent abrasion resistance

PACKAGING

5 Gallon Kit: One 5 gallon pail, net fill 4 gallons (15.12 liters) of Part-A and one 1 gallon (3.78 liters) can of Part-B.

1 Gallon Kit: 1 gallon can, net fill 0.80 gallons (3 liters) of Part-A and one quart can, net fill 0.20 gallons (0.78 liters) of Part-B.

Mixing Ratio by Volume:

(4) Part-A: (1) Part-B

SURFACE PREPARATION

The concrete substrate must be clean, sound and dry. New concrete should cure for at least 30 days. Ultra-Prime 100 will not fill voids or bridge large cracks. All voids and cracks must be patched using Umaco Universal 1023 then allowed to cure. The minimum pull off strength of the substrate is 200 psi. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, paint or any other foreign material which might effect the bond. **SEE WARNING REGARDING PAINT REMOVAL.** Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces. The concrete must have a

surface profile of CSP 3-5. Suitable preparation methods include dustless grinding, shot-blasting, scarification and etching using Umaco Ultra-Etch.

Concrete Moisture

Perform testing to verify that the vapor pressure is below 3.0 pounds per 1000 square feet per 24 hours. If the vapor pressure exceeds this limit, 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.

MIXING

Umaco Ultra-Prime 100 is sold as kit, (4) Part-A Resin: (1) Part-B Hardener. Pour Part-B into Part-A then mix using a paddle attached to a low speed drill (400-600 RPM) for approximately 90 seconds until one even color develops. Mix only enough material that can be applied within 30 minutes at 70° F.

APPLICATION

Umaco Ultra-Prime 100 can be applied using a brush or 1/4" or 3/8" nap roller. This product is best suited for application in temperatures between 55°F to 90°F with relative humidity below 85%. Maintain recommended temperature and relative humidity during application and curing process.

TOPCOATING

Before topcoating, allow the first coat to dry for at least 7-10 hours (at 70° F). Make sure that the first coat has tacked off by pressing on the material with your thumb. If no impression is created, then the surface is ready for top coating. If any epoxy blushes were developed remove prior to topcoating by using a standard detergent cleaner such as Umaco Ultra-Clean. If more than 12 hours pass before topcoating, the first coat must be lightly sanded using 60 grit sand paper prior to topcoating.

COVERAGE

Approximate coverage is 229-320 ft² per gallon at 5-7 mils.

CLEANUP

Clean up mixing station, tools and equipment as required using denatured alcohol. Observe all legal, health and safety precautions when handling or storing solvents and materials particularly in confined spaces.

DISPOSAL

Dispose of empty packaging and other waste in accordance with federal, state, provinces and local regulations

STORAGE

Umaco Ultra-Prime 100 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-90°F (15-32°C).

LIMITATIONS

- Color or gloss may be affected by humidity, low temperatures, chemical exposure or sodium vapor lighting
- Product will yellow in the presence of UV light
- Do not apply on wet or damp substrate
- Apply when ambient and surface temperatures are between 55°F to 90°F and relative humidity is less than 75%
- Substrate temperature must be 5° F above dew point
- New concrete must cure 30 days
- Restrict the use of floor to light traffic and non-harsh chemicals until the coating has fully cured
- Light or bright colors may require multiple coats
- For added chemical resistance, color stability or UV stability, topcoat with a suitable aliphatic urethane (Umaco Ultra-Glaze 400).



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TECHNICAL DATA

Solids by Weight:

53% (colors), 45% (clear)

Solids by Volume:

41% (colors), 36% (clear)

VOC's:

1.01 pounds per gallon (colors)

1.00 pounds per gallon (clear)

Color: Clear and a variety of colors

Recommended Film Thickness:

5-7 mils per coat wet thickness

(yields 2-3.5 mils dry)

Coverage per Gallon (5-7 mils):

229 - 320 ft²/gal

Finish Characteristics:

Satin Gloss (40 -80 at 60° at glossmeter)

Abrasion Resistance:

Taber abraser CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 54 mg loss

Impact Resistance: Gardner Impact, direct = 50 in. lb (passed)

Flexibility: No cracks on 1/8" mandrel

Adhesion: 425 psi at elcometer (concrete failure, no delamination)

Viscosity:

Colors: 900-1200 cps (typical)

Clear: 400-900 cps (typical)

Application Temperature: 55-90°F, with relative humidity below 75%

Pot Life (1 Gallon): 1 to 1-1/2 hours

Tack Free (Dry to Touch): 5 to 8 hours

Recoat or Topcoat: 7 to 10 hours

Light Foot Traffic: 16 to 24 hours

Full Cure (Heavy Traffic): 2 to 7 days

CHEMICAL RESISTANCE

Xylene: 2 hour term splash spill

MEK: not recommended

Gasoline: 2 hour term splash spill

10% Sodium Hydroxide:

8 hour term splash spill

50% Sodium Hydroxide:

2 hour term splash spill

10% Sulfuric Acid:

2 hour term splash spill

10% Hydrochloric Acid:

2 hour term splash spill

20% Nitric Acid: not recommended

5% Acetic Acid: 2 hour term splash spill

Ethylene Glycol: 8 hour term splash spill

WARNING

Harmful if inhaled. Harmful if swallowed. May cause eye irritation. May cause allergic skin reaction. Before using, read the Safety Data Sheet and follow all precautions to prevent bodily harm.

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. 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

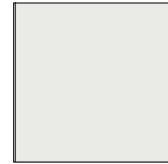
LIMITED WARRANTY

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. (2021)

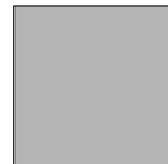
AVAILABLE COLORS

Colors shown below are just a representation of the actual color.

For exact color, request a physical/draw down sample.



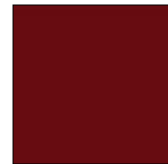
Light Gray



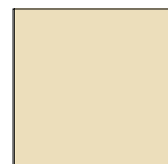
Medium Gray



Dark Gray



Tile Red



Beige

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