Diama-Epoxy Cove Resin

Item Number: DCEPACOVE – 100-01

DESCRIPTION

DiamaPro® Diama-Epoxy Cove Resin is a 2-component, 100% solids resinous wall-cove system that can be applied in hot arid or humid environments. The pre-thickened formula is easy to install. The system has high adhesion to concrete. It is available in 3 different set/cure times. The long working time version aids in decreasing the risk of roller and brush marks making it ideal for less experienced installers.

ADVANTAGES

- Pre-thickened formulation
- Easy Installation
- Meets USDA, FDA, EPA, and SCAQMD Standards
- Eligible for LEED Points: Made in California from
- Partially Recycled Materials
- Adhesion to Concrete, Wood, Metal, Non-glazed Tiles
- Anti-bacterial
- Low Maintenance
- Low Odor

SUGGESTED USES

- As a Primer
- Vertical Coat
- Wall Cove
- Seamless Moisture Mitigation
- Slurry, Mortar, and Decorative Systems
- High Traffic and Impact Resistance
- Waterproofing Applications

SUGGESTED APPLICATION AREAS

Industrial

- Healthcare
- Commercial
- Government
- Institutional
- Residential
- ADA Compliant Ramps

FINISH AND COLOR

- Gloss Clear or Opaque when Pigmented:

PRECAUTIONS AND LIMITATIONS

- UV Resistance:
  - Coating will amber over time.
  - If color stability is important, use UV-stable Diama-Thane, Diama-Poly or Diama-Cryl
- Prime Coat
  - A prime coat may be required if stem walls are highly absorbent.

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  - If outgassing is suspected or prevalent.
  - If concrete is very porous or in poor condition.
- All concrete repairs must be completed before installing any system.
- DO NOT let material puddle on floor.
- Complete onsite mockups to ensure desired results are achieved.
- Application temperatures
  - When temperatures increase, material cures faster.
  - When temperatures decrease, material cures slower.
- Application times
  - Based on test results compiled by lab technicians in a controlled setting.
  - If application temperatures are outside of those recommended, contact your DiamaPro® Technical Representative.
- Coverage rates
  - Are used for estimating purposes only.
  - Factors such as waste, unusual/abnormal substrate conditions, and other unforeseen job-site conditions may affect actual product yields.
  - Are the responsibility of the installer.
- Apply material when temperature is decreasing – adhere to the DiamaPro® Dew Point Calculation Chart.
- DO NOT apply under direct sunlight.
- DO NOT install under inclement weather conditions.
- For best results, apply when application temperatures and relative humidity are high.

COMPONENTS

1.5 gal. kit

- Part A: Top Shelf® Epoxy Cove-Resin, 1 gal
- Part B: Top Shelf® Epoxy EZ, 1/2 gal

15 gal. kit

- Part A: Top Shelf® Epoxy Cove-Resin, 10 gal
- Part B: Top Shelf® Epoxy EZ, 5 gal

SAFETY AND TESTING

- Safety
  - Personal protective equipment and safety conditions must be considered before using any product. Review all relevant and current documentation including Safety Data Sheets.
- Testing
  - Before installation: Test and look for any unknown site conditions and/or defects. To ensure desired results are achieved, the system should be tested in a small area on site before full installation begins.

STORAGE TEMPERATURES

Ideal Storage Environment	Dry, Out of Direct Sunlight, 60-80°F
Material Temperature During Application	50-70°F and 5°F Above Dew Point
Minimum Substrate Temperature During Application	5°F Above Dew Point
Recommended Application Temperature	60-110°F, <90% RH (Relative Humidity)

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APPLICATION TEMPERATURES

DiamaPro® Diama-Epoxy Cove Resin – Slow Cure

Ambient Temperature	60-110°F, <90% RH	50°F, 50 % RH	70°F, 50 % RH	100°F, 50 % RH
Working Time	40-50 min	1 hr.	50 min	30 min.
Recoat Window	9-36 hrs.	18-36 hrs.	9-36 hrs.	8-24 hrs.
Return to Service (Foot Traffic)	24 hrs.	36 hrs.	24 hrs.	24 hrs.
Full Cure (Vehicle Traffic)	7 days	7 days	7 days	7 days

DiamaPro® Diama-Epoxy Cove Resin – Standard Cure

Ambient Temperature	60-95°, <90% RH	50°F, 50 % RH	70°F, 50 % RH	100°F, 50 % RH
Working Time	25-35 mins	45 min	35 min	25 min
Recoat Window	7.5-36 hrs.	14-36 hrs.	7.5-36 hrs.	6-24 hrs.
Return to Service (Foot Traffic)	24 hrs.	36 hrs.	24 hrs.	24 hrs.
Full Cure (Vehicle Traffic)	7 days	7 days	7 days	7 days

DiamaPro® Diama-Epoxy Cove – Fast Cure

Ambient Temperature	41-85°F, <90% RH	50°F, 50 % RH	70°F, 50 % RH	100°F, 50 % RH
Working Time	15-20 mins	15-20 min	20 min	10 mins
Recoat Window	5.5-24 hrs.	10-24 hrs.	5.5-24 hrs.	4-16 hrs.
Return to Service (Foot Traffic)	10 hrs.	24 hrs.	10 hrs.	10 hrs.
Full Cure (Vehicle Traffic)	5 days	5 days	5 days	5 days

SURFACE PREPARATION

- Must be sound
- All necessary concrete repairs have been completed.
- Must be clean, dry, and free of any contaminates, moisture, materials, or particles that may hinder material's adhesion to the substrate.
- When applying directly over concrete, the substrate must be mechanically profiled to ICRI CSP 3.
- Different projects may require a different concrete surface profile.
- Adhere to International Concrete Repair Institute current standards.

MIXING

1.5 gal. kit Mix Ratio	Part A - 1 gal: Part B - 1/2 gal
Viscosity Reducer	1-2 qt. per 1.5 gal. kit.
Top Shelf® Epoxy Colorant	16 oz per 1.5 gal. kit
Crack / Joint Repair with 20 or 30 Mesh Sand/Quartz	10-75 lbs. per 1.5 gal. kit
Mixing Drill	Low-RPM, low-torque drill with Jiffy double-bladed mixer
Mixing Drill When Combining With Large Aggregates	High-RPM, high-torque drill with Jiffy double-bladed mixer
Mixing Directions	Mix A until color and consistency are uniform. Add B and continue to mix for 2 min.
Mixing Directions with Viscosity Reducer	Mix A with B for 1 minute. Add additive and continue to mix for 1 minute or until color and consistency is uniform.

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Mixing Directions with Colorant	Mix A with colorant until color and consistency is uniform. Add B and continue to mix for 2 min.
Mixing Directions with Aggregate	Mix A alone or with colorant until color and consistency is uniform. Add B and continue to mix for 2 min. Slowly add aggregate and continue to mix for 1 min.

COVERAGE RATE PER 1.5 GAL. KIT

Wall Cove Primer/Topcoat	300-375 lin.ft./1.5 gal. kit
Wall Cove Body Coat, 4" high by 3/16" thick with 1" radius	60 lin.ft./1.5 gal. kit
Wall Cove Body Coat, 6" high by 3/16" thick with 1" radius	40 lin.ft./1.5 gal. kit
Crack and Joint Repair, 1/4" wide by 1/4" deep	460 lin.ft./1.5 gal. kit
Crack and Joint Repair	See Joint and Filler Rates (kretus.com/joint-filler-rates).
Cap Coat Over F-Grade Or 30-Mesh Quartz/Sand Broadcast	300-375 lin.ft./1.5 gal. kit
Vertical Coat, 3-5 mils	480-800 sq.ft./1.5 gal. kit

PROPERTIES WHEN FULLY CURED

PROPERTIES	TEST METHOD	TYPICAL VALUES
Abrasion Resistance	ASTM D4060	40 mg loss
Abrasion Resistance with Anti-Slip	ASTM D4060	24-30 mg
Adhesion Strength	ASTM D4541	400 psi, concrete failure
Adhesion Strength	ASTM D4541	400 psi, vinyl failure
Adhesion Strength	ASTM D4541	500 psi, natural quartz failure
Adhesion Strength	ASTM D4541	450 psi, color quartz failure
Compressive Strength	ASTM D695	13,700 psi
Flame Spread/Critical Flux	ASTM E648	Class 1
Flame Spread/Rate of Burning **Flexural Strength**	ASTM D635 ASTM D790	Self-extinguishing 9,000 psi
Hardness (Shore D)	ASTM D2240	85
Impact Resistance	ASTM D2794	120 in-lbs.
Indoor Air Quality	CA 01350	Compliant
Microbial Resistance	ASTM G21	Passes, 0 growth
Modulus of Elasticity	ASTM D790	5.0 x 10^5 psi
Moisture Vapor Permeance	ASTM E96	0.08 perms
Tensile Elongation at Break	ASTM D638	5%
Tensile Strength	ASTM D638	7,800 psi
Thermal Coefficient of Linear Expansion	ASTM D696	18.0 x 10^(-)6 in/in/°F
Water Absorption	ASTM D570	<0.05%
Moisture Vapor Emission Rate	ASTM F1869	8-10 lbs.
Relative Humidity	ASTM F2170	<80%

CHEMICAL AND STAIN RESISTANCE

1 = Best for chemical resistance: Chemical has no adverse effects on fully cured coating; remove within 24 hours.
2 = Low potential for stain: Chemical has no adverse effects on fully cured coating if removed within 24 hours.
3 = High potential for stain or degradation: Chemical must be removed within 24 hours of exposure.
NR = Not recommended

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Acetic Acid (Component of Vinegar), 10%	1	Methanol	NR
Acetic Acid, 30%	2	Methylene Chloride	NR
Acetone	NR	MIBK (Methyl Isobutyl Ketone)	NR
Ammonia, 30%	1	Mineral Oil	1
Ammonium Hydroxide, 30%	1	Motor Oil, SAE 30	1
Antifreeze (Coolant)	1	Mineral Spirits	NR
Benzene (Component of Crude Oil)	3	Mustard, Yellow	2
Benzyl Alcohol	3	Nitric Acid, 30%	NR
Betadine, 11%	NR	Oleic Acid	1
Boric Acid, 4%	1	Oxalic Acid, 10%	1
Brake Fluid, DOT 3	1	Phosphoric Acid, 20%	3
Chromic Acid, 10%	3	Potassium Hydroxide, 30% (Alkaline Batteries, Mfg.)	1
Chromic Acid, 30%	3	Propylene Glycol	1
Citric Acid, 30%	1	Silver Nitrate, 20% (Photo Labs)	3
Ethanol, 95%	NR	Hydraulic Fluid (Aviation), Skydrol LD-4	2
Ethyl Acetate, 99% (Food/Beverage Facility)	NR	Sodium Chloride, 20%	1
Formaldehyde, 37%	3	Sodium Hydroxide (Caustic Soda), 50%	1
Premium Gasoline	1	Sodium Hypochlorite (Bleach), 10%	2
Hydraulic Fluids (Machinery, Automobile, Aviation)	2	Sodium Hypochlorite (Bleach), 30%	3
Hydrochloric Acid, 10%	3	Sodium Persulfate (Bleaching and Oxidizing Agent)	3
Hydrochloric Acid, 30%	3	Sulfuric Acid, 37% (Battery Acid)	NR
Hydrofluoric Acid, 10%	1	Tannic Acid, 20%	3
Hydrofluoric Acid, 30%	3	Tartaric Acid, 10%	1
Hydrogen Peroxide, 10%	NR	Transmission Fluid	1
Hydrogen Peroxide, 50%	NR	Urine, Dog or Cat	1
Iodine, 2%	3	Urea (Nitrogen-Rich Fertilizer)	1
Isopropyl Alcohol	3	Vinegar, Distilled	1
Jet Fuel	1	Water (Hard Water from Well)	1
Lactic Acid, 30% (Dairy Facility)	NR	Whisky	1
Lime Juice	2	Wine, Cabernet Sauvignon	1
Magnesium Hydroxide	1	Xylene	2
MEK (Methyl Ethyl Ketone)	NR		3

Availability: DiamaPro® Diama-Epoxy Cove Resin is only available through DiamaPro Systems® Authorized Distributors and Applicators. Packaged in 5-gallon units. For a list of Authorized please contact DiamaPro Systems®.

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