



TECHNICAL DATA SHEET

UV Resistant Epoxy 455

100% SOLIDS UV RESISTANT EPOXY COATING

PRODUCT DESCRIPTION:

UV Resistant Epoxy 455 is a water white, low viscosity epoxy resin system that offers improved chemical resistance while maintaining good strength, flexibility and impact resistance. URE455 is based upon the latest epoxy hardener technology available and has a high tolerance for moisture allowing it to adhere to damp concrete. URE455 is designed for use as a floor coating or an aggregate binder resin. The clarity of the system produces an enhanced appearance when used in decorative colored quartz or color chip systems. URE455 is not only very low in color, but also offers good resistance to UV yellowing (for highest resistant use UV-Glaze 235). The pigmented version makes an ideal binder for broadcast systems and troweled mortars. Areas that are exposed to spilled liquids will become slippery when wet. The use of non-skid aggregate is highly recommended in these areas. Do not apply over structurally unsound surfaces. Thinning this product will affect cure times and the ultimate properties of the system. Critical re-coat times will also be affected. A special version containing an anti-microbial agent is available.

- Water White Color
- Excellent Adhesion
- Water Resistant
- Highly Chemical Resistant
- No Volatile Organic Content
- Low Odor
- Stain Resistant
- Excellent Durability
- Overnight Cure

PACKAGING: MIX RATIO 2 parts A to 1 part B	COVERAGE @ 5 - 10 mils
1 gallon kit – 1 gallon Part A + ½ gallon Part B	160- 320 sq. ft. per gallon
3 pail kit – 2 pails Part A + 1 pail Part B	

INSURE THAT BOTH COMPONENTS ARE WELL MIXED BEFORE USING.

PHYSICAL PROPERTIES OF MIXED MATERIAL (PART A & PART B):

Finish	Gloss
Colors	Clear, White, Black, 24 Standard Colors
Resin Composition	Bis A epoxy resin and cycloaliphatic & aliphatic amines
Thinner / Reducer	Methyl Ethyl Ketone (MEK)
Application Method:	Serrated squeegee, 3/8" – 5/16" Nap Roller and Loop or Porcupine Roller
Weight Solids (Mixed A + B)	100%
Viscosity, cps	600
Pot Life, 100 gram mass, minutes	35 - 45
Cure Time (77° F & 50% Rel. Humidity.)	Foot Traffic: 12 Hours Light Traffic: 24 Hours Heavy Traffic: 72 Hours Full Cure: 5-7 days
Recoat Time (77° F & 50% Rel. Humidity.)	From 12 to 24 hours. After 24 hours screen before recoat.
Shelf Life, unmixed material, @ 75F	1 year in unopened containers
Ratio, Component-A/Component-B	2:1 by volume
Minimum temperature at which material can be applied, accelerated	40°F
Bond Strength	Passed 400 psi (concrete failure)
Compressive Strength	22,000psi
Tensile Strength	5,500 psi
Compressive Yield Strength	6,250 psi

DISTRIBUTORS OF DECORATIVE AND PROTECTIVE CONCRETE COATING SYSTEMS

1402B North 26th Ave. Phoenix, AZ 85009 (T)602-455-9200 (F) 602-455-9090
 Website: www.technicalcoatingsusa.com E-Mail info@technicalcoatingsusa.com



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CHEMICAL RESISTANCE DATA

Legend:

E = Excellent – suitable for continuous contact

G = Good – suitable for contact up to 24 hours

F = Fair- suitable for slash and spill followed by prompt clean-up and water flush

NR = Not Recommended

*** = Coating Stains**

Inorganic Acids	Rating	Solvents	Rating
10% Hydrochloric Acid	E	Methyl Ethyl Ketone	G
37% Hydrochloric Acid	E*	Xylene	E
10% Nitric Acid	E	Toluene	E
50% Nitric Acid	G*	Isopropanol	E
10% Phosphoric Acid	E	Ethanol	E
50% Phosphoric Acid	E*	Ethyl Acetate	G
10% Sulfuric Acid	E	Trichloroethylene	F
50% Sulfuric Acid	G*	Mineral Spirits	E
98% Sulfuric Acid	NR	Naphtha	E
Organic Acids	Rating	Food And Beverages	Rating
10% Acetic Acid	E*	Water	E
25% Acetic Acid	G*	Coffee	E
50% Acetic Acid	NR	Milk	E
Glacial Acetic Acid	NR	Mustard	E*
85% Lactic Acid	G	Vinegar	E
50% Citric Acid	E	Vegetable Oils	E
		Beer	E
		Wine	E
Fuels, Lubricants, Hydraulic Fluids	Rating		
Gasoline	E	Whiskey	E
Transmission Fluid	E	Cola	E
Brake Fluid	E		
Skydrol	E	Miscellaneous	Rating
Jet Fuel A-1	E	Blood	E
Motor Oil	E	Urine	E



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SURFACE PREPARATION:

Concrete-

Surfaces must be clean and sound. Concrete surfaces may be dry, or slightly damp. Remove dust, laitance, grease, curing compounds, impregnations, waxes, foreign particles, and disintegrated materials by mechanical abrasion methods such as sandblasting.

MIXING INSTRUCTIONS:

Add 1 part Component B to 2 parts Component A by volume. Thoroughly mix the parts into larger container and intermix with containers 2 -3 times to ensure that the entire contents of both containers is thoroughly incorporated into the entire mixture. Mix until blend is uniform in consistency. For sealer coats 1 pint of MEK per gallon can be added for thinner mixes, but should not be necessary. This product does not require an induction time and should be used immediately.

APPLICATION:

This material can be applied as a coating with a serrated squeegee, notched trowel or non-shedding roller to achieve the desired thickness. It may also be used with the appropriate aggregate for slurry, broadcast and trowel applied mortar systems. Contact the factory for specific recommendations.

CLEAN-UP:

Clean brushes, tools and spray rigs with xylene or MEK. Dispose of all waste in accordance with local state and federal organizations.

KEEP OUT OF THE REACH OF CHILDREN.

Do not take internally. Wash hands or any part of your body that comes into contact with this product. Avoid breathing vapor, mist or fumes from fires.

Do not use in tank or pit without proper protection.

Use product in accordance with this product data sheet, any variance voids all warranties and liabilities. Read Material Safety Data Sheet before use of this product.

IMPORTANT NOTICE TO PURCHASER:

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be performed by qualified professionals only. Before using any chemical product, read its Material Safety Data Sheet.

Due to the variables of every job such as installation techniques, climate, miscommunication or misunderstanding, etc. The sellers' and manufacturers' only obligation shall be to replace such quantity of the product which is proven to be defective. Neither the seller nor manufacturer shall be liable for any injury, loss or damage, direct, incidental or consequential, arising out of the use of or misuse of this product. Before using the applicator shall determine the suitability of this product for the intended use and the applicator assumes all liability whatsoever in connection there with.

Where this product is used under conditions beyond our control, neither the seller nor the manufacturer will be responsible for damages in excess of the purchase price of this product.

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WARRANTY

This product is warranted to be free of defect to the original purchaser. Any unused product proven to be defective must be returned to the seller for replacement. Any warranty of this product is limited to the replacement of any purchased product that has been paid for in full and been shown to be defective. The seller or manufacturers only obligation shall be to replace such quantity of the product proven to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct, incidental or consequential, arising out of the use of or misuse of this product. Before using this product the applicator shall determine the suitability of this product for the intended use and the applicator assumes all liability whatsoever in connection therewith.

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PROBLEMS	CAUSES
Fisheyes	Oil Contamination; Improper substrate cleaning; Release Agents; Improper Mixing
Peeling from Substrate	Insufficient preparation process; Oil impregnation; Moisture in concrete. Improper surface preparation.
Peeling Between Coats	Past critical recoat time; Contamination between coats.
Coating Soft, Dulling	Improper mixing; Use of thinner in product; Extreme weather conditions.
Slow Cure	Low floor and ambient temperatures; Use of thinner in product; Improper mixing; Product applied too thin.
Fast Cure	High floor and ambient temperatures. High product temperatures.
Bubbling	High temperatures; No primer used; Working product past pot life; Improper mixing overworked the product. Excessive rolling the product.

DISPOSAL: DISPOSE OF ALL WASTE IN ACCORDANCE WITH LOCAL STATE AND FEDERAL GOVERNMENT REGULATIONS. Empty containers may contain coating residue, including flammable liquids or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned.

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