



## TECHNICAL DATA SHEET

# HSE-255

### HIGH SOLIDS EPOXY BINDER / COATING

#### PRODUCT DESCRIPTION:

**HSE-255** is a low viscosity, light colored, 100% solids epoxy system designed as an aggregate binder and sealer. The clear version is used for decorative color quartz and color paint chip systems. For exterior decorative epoxy stone systems a more UV resistant version is available. *HSE255 Epoxy* is used as a primer-sealer, self-leveling slurry, broadcast and troweled mortar systems. *HSE255 Epoxy* offers excellent adhesion, strength and durability. Chemical resistance is very good and applicable to most commercial and industrial environments, but it is not designed for use in highly corrosive areas like commercial kitchens, breweries, battery recharge rooms or containment areas (see CRE555 or CRN655). As with all high performance coatings the cured product will become slippery when wet with water or other liquids. The use of non-skid aggregate is recommended. Do not apply this product if surface or air temperatures are under 60 °F or over 100 °F or if the relative humidity is over 85%. 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.

- Chemical Resistant
- Stain Resistant
- Excellent Durability
- Excellent Adhesion
- No Volatile Organic Content
- Great UV Light Resistance
- Water Resistant
- Low Odor
- Overnight Cure

#### PHYSICAL PROPERTIES

PACKAGING: VOLUME MIX RATIO 2 parts A to 1 part B	COVERAGE @ 5 - 10 mils
1.5 gallon kit = 1 gallon part A & 1/2 gallon part B	240 – 480 sq. ft. per kit
15 gallon kit = 10 gallons part A & 5 gallons part B	2400 – 4800 sq. ft. per kit

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	Epoxy resin & modified aliphatic amines
Thinner / Reducer	Methyl Ethyl Ketone (MEK)
Application Method:	Serrated squeegee, Trowel, 3/8" – 5/16" Nap Roller and Loop or Porcupine Roller
Weight Solids (Mixed A + B)	100%
Viscosity, cps	1000
Gel Time / Pot Life, 100 gram mass, minutes (77° F & 50% Rel. Humidity.)	35
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	50°F
Bond Strength	Passed 400 psi (concrete failure)
Compressive Strength	20,510 psi
Tensile Strength	8,500 psi
Flexural Strength	12,500 psi
Compressive Yield Strength	14,200 psi

#### DISTRIBUTORS OF DECORATIVE AND PROTECTIVE CONCRETE COATING SYSTEMS

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### CHEMICAL RESISTANCE DATA

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

**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**

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### **SURFACE PREPARATION:**

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

### **MIXING INSTRUCTIONS:**

Premix components completely before combining. Add 2 parts Component A to 1 part Component B by volume. Mix until blend is uniform in consistency; this will usually take 5 – 10 minutes. When mixing with a mechanical mixer do not over mix or whip contents, this will add excessive air to the coating. This product does not require an induction time and should be used immediately.

### **APPLICATION:**

Apply to surface by brush, roller or squeegee at 100 - 400 square feet per gallon. For thinner applications use mohair roller cover.

### **CLEAN-UP:**

Clean brushes, and spray rigs with xylene or MEK. On concrete use xylene or MEK and a wire brush this will remove most of the adhesive if used within 15 - 30 minutes of application. 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:**

The information contained in this document is furnished without warranty, representation, inducement or license of any kind, except that it is accurate to the best of TCC Sales & Service, LLC., Inc. knowledge or obtained from sources believed by TCC Sales & Service, LLC., Inc. to be accurate. TCC Sales & Service, LLC., Inc. does not assume any legal responsibility for use or reliance upon the information contained in this document. Tests should be carried out only by qualified professionals. 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 seller's and manufacturer's only obligation shall be to replace such quantity of the product which is proven to be defective. Neither the seller or 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 or the manufacturer will be responsible for damages in excess of the purchase price of this product.

### **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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### TROUBLE SHOOTING

<b>PROBLEMS</b>	<b>CAUSES</b>
Fisheyes	Oil Contamination; Improper substrate cleaning; Release Agents; Improper Mixing
Peeling from Substrate	Insufficient preparation process; Oil impregnation; Excessive moisture in concrete. Improper surface preparation.
Peeling Between Coats	Past critical recoat time; Contamination between coats.
Coating Soft, Dulling	Improper mixing; Use of excessive thinner in product; Extreme weather conditions.
Slow Cure	Low surface 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. Excessive warm or hot air flow over the coating during cure.

**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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