



## TOP SHELF® EPOXY SG A-RESIN | TH

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### Get Tough Jobs Won

KRETUS TOP SHELF® EPOXY SG A-RESIN | TH is a 3-component, 100% solids self-leveling epoxy slurry that can be applied in mid- to high-temperature environments. It has high adhesion to concrete and a 24-hour return-to-service with 7 days to full cure.

#### ADVANTAGES

- 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
- High Traffic and Impact Resistance
- Low Maintenance
- Low Odor
- Waterproofing

#### SUGGESTED USES AND APPLICATION AREAS

- Slurry, Mortar, and Decorative Systems
- Industrial, Healthcare, Commercial, Government, Institutional, and Residential

#### KRETUS® SYSTEMS

- Color Chip
- Color Quartz
- ESD (Static Control)
- Industrial Sand

For all KRETUS® systems, see [kretus.com/systems](http://kretus.com/systems).

#### APPEARANCE AT FULL CURE

- Gloss, Yellowish White

#### PRECAUTIONS AND LIMITATIONS

- **Prime Coat:** A prime coat may be required if stem walls are highly absorbent, if outgassing is suspected or prevalent, or if concrete is very porous or in poor condition. All concrete repairs must be completed before installing any system.
- **UV Resistance:** Coating will amber over time. If color stability is important, use UV-stable Urethane Polymer Concrete RC UV, Polyurethane, Polyaspartic, or Acrylic Sealer. See [kretus.com/products](http://kretus.com/products).
- DO NOT apply any single coat less than 1/8" (50 SF/kit) or greater than 3/16" (35 SF/kit).
- DO NOT let material puddle on floor. This may cause white spots to appear when coating cures.
- Complete samples and onsite mockups to ensure desired results are achieved.
- Application times are based on test results compiled by lab technicians in a controlled setting. All times recorded using 1-quart samples. All Top Shelf® hardeners were combined with A-Resin.
- Apply material when temperature is decreasing—adhere to the KRETUS® Dew Point Calculation Chart available at [kretus.com/project-planning](http://kretus.com/project-planning). DO NOT apply under direct sunlight. DO NOT install under inclement weather conditions.
- At lower or dropping temperatures, material cures more slowly. It also becomes more viscous and will require more effort to install.
- Higher or increasing temperatures will reduce working times and material will cure more quickly.

- If application temperatures are outside of those recommended, contact your KRETUS® Technical Representative.
- Coverage rates are for estimating purposes only. Factors such as waste, unusual/abnormal substrate conditions, and other unforeseen jobsite conditions may affect actual product yields and are the responsibility of the installer.
- Recommended for Applicators level 4 and up. (See [kretus.com/applicator-skill-level](http://kretus.com/applicator-skill-level).)

## COMPONENTS

### Standard Kit

- Part A: Top Shelf® Epoxy A-Resin, 1 gal
- Part B: Top Shelf® Epoxy TH, 1/2 gal
- Part C: Top Shelf® Epoxy SG, 25 lbs.

Larger kits may be available through KRETUS® distributor.

### SAFETY, TESTING, AND WARRANTY

- **Safety:** Personal protective equipment and safety conditions must be considered before using any product. Review all relevant and current documentation including Safety Data Sheets ([kretus.com/safety-data-sheets](http://kretus.com/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.
- **Warranty:** For warranty to be upheld, Pre- and Post-Job Checklists ([kretus.com/project-planning](http://kretus.com/project-planning)) must be completed.

### STORAGE AND APPLICATION 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	60-80°F, <90% RH

### Average Application Time

Ambient Temperature	60-80°F, <90% RH	50°F, 50 % RH	70°F, 50 % RH	100°F, 50 % RH
Working Time	20-25 mins	20-25 min	25 min	20 min
Recoat Window	8-24 hrs.	16-36 hrs.	8-24 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

### MIXING AND APPLICATION

Standard Kit Mix Ratio	A:B:C = 1 gal:1/2 gal:25 lbs.
Mixing Drill	High-speed, high-torque drill with Jiffler double-bladed mixer
Mixing Directions	Mix A until color and consistency are uniform. Add Part B and mix for 30 seconds. Slowly add Part C and continue mixing for 2 minutes or until color and consistency are uniform.

### Coverage Rates per Standard Kit

Self-leveler, 1/8"	50-60 SF/kit
Self-leveler, 3/16"	35-40 SF/kit

Premeasure components to make sure you are using the correct mix ratio. Combine components according to mix instructions. Continue mixing until the coating's consistency is uniform. The coating must remain thoroughly mixed during the application.

Keep a wet edge while applying product. Wear spiked shoes when walking on material. For more applications and coverage rates, see KRETUS® General Overview ([kretus.com/product-general-overviews](http://kretus.com/product-general-overviews)).

**PROPERTIES WHEN FULLY CURED**

PROPERTIES	TEST METHOD	TYPICAL VALUES
Abrasion Resistance	ASTM D4060	40 mg loss
Adhesion Strength	ASTM D4541	400 psi, concrete failure
Compressive Strength	ASTM D695	13,700 psi
Flame Spread/Critical Flux	ASTM E648	Class 1
Flame Spread/Rate of Burning	ASTM D635	Self-extinguishing
Flexural Strength	ASTM D790	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 <sup>5</sup> 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 <sup>-6</sup> in/in/°F
Water Absorption	ASTM D570	<0.05%
Moisture Vapor Emission Rate	ASTM F1869	15 lbs.
Relative Humidity	ASTM F2170	<90%

**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

Acetic Acid (Component of Vinegar), 10% .....	1	Formaldehyde, 37% .....	3
Acetic Acid, 30%.....	2	Premium Gasoline.....	1
Acetone.....	NR	Hydraulic Fluids	
Ammonia, 30%.....	1	(Machinery, Automobile, Aviation) .....	2
Ammonium Hydroxide, 30% .....	1	Hydrochloric Acid, 10%.....	3
Antifreeze (Coolant).....	1	Hydrochloric Acid, 30%.....	3
Benzene (Component of Crude Oil).....	3	Hydrofluoric Acid, 10% .....	1
Benzyl Alcohol .....	3	Hydrofluoric Acid, 30% .....	3
Betadine, 11% .....	NR	Hydrogen Peroxide, 10% .....	NR
Boric Acid, 4% .....	1	Hydrogen Peroxide, 50% .....	NR
Brake Fluid, DOT 3 .....	1	Iodine, 2% .....	3
Chromic Acid, 10%.....	3	Isopropyl Alcohol .....	3
Chromic Acid, 30%.....	3	Jet Fuel.....	1
Citric Acid, 30% .....	1	Lactic Acid, 30% (Dairy Facility).....	NR
Ethanol, 95%.....	NR	Lime Juice .....	2
Ethyl Acetate, 99% (Food/Beverage Facility) .....	NR	Magnesium Hydroxide.....	1

MEK (Methyl Ethyl Ketone) .....	NR	Sodium Hydroxide (Caustic Soda), 50% .....	1
Methanol .....	NR	Sodium Hypochlorite (Bleach), 10% .....	2
Methylene Chloride .....	NR	Sodium Hypochlorite (Bleach), 30%.....	3
MIBK (Methyl Isobutyl Ketone).....	NR	Sodium Persulfate	
Mineral Oil .....	1	(Bleaching and Oxidizing Agent).....	3
Motor Oil, SAE 30 .....	1	Sulfuric Acid, 37% (Battery Acid) .....	NR
Mineral Spirits.....	NR	Tannic Acid, 20%.....	3
Mustard, Yellow .....	2	Tartaric Acid, 10% .....	1
Nitric Acid, 30% .....	NR	Transmission Fluid .....	1
Oleic Acid .....	1	Urine, Dog or Cat .....	1
Oxalic Acid, 10%.....	1	Urea (Nitrogen-Rich Fertilizer).....	1
Phosphoric Acid, 20% .....	3	Vinegar, Distilled .....	1
Potassium Hydroxide, 30%		Water (Hard Water from Well) .....	1
(Alkaline Batteries, Soap Manufacturing).....	1	Whisky .....	1
Propylene Glycol.....	1	Wine, Cabernet Sauvignon .....	2
Silver Nitrate, 20% (Photo Labs) .....	3	Xylene .....	3
Sodium Chloride, 20%.....	1		

Pigments or colorants may affect working times, reduce chemical resistance, or increase potential for stain. Coatings tested at ambient temperature over 1-3 days' exposure to chemical. To ensure desired results are achieved, products should be tested on site before installation.

**DISCLAIMER:** The information contained in this document is intended for use by KRETUS®-qualified and -trained professionals. This is not a legally binding document and does not release the specifier from their responsibility to apply materials correctly under the specific conditions of the construction site and the intended results of the construction process. The most current valid standards for testing and installation, acknowledged rules of technology, as well as KRETUS® technical guidelines must always be adhered to. The steps given in this document and other mentioned documents are critical to the success of your project.