

KEMPEROL® 022

Cold Liquid-Applied Interior Resin

PRODUCT DESCRIPTION

KEMPEROL® 022 is a two-component, high performance, cold-liquid applied, solvent-free, low VOC, crack-spanning resin for waterproofing beneath tile and stone applications.

COMPOSITION & MATERIALS

A seamless and monolithic crack isolation membrane is created in the field by combining the KEMPEROL® 022, a solvent free, cold liquid-applied, 2-part polyurethane / epoxy hybrid resin with the KEMPEROL® 500 fleece, a non-woven polyester reinforcement.

Work Pack includes: Component A: Gray Formulation, Component B: Amber Formulation

USE

KEMPEROL® 022 fully reinforced membrane is suitable for interior waterproofing applications for a variety of substrates beneath tile and stone, shower pans, bathrooms, water features, kitchens, mechanical rooms and other wet room applications. TCNA tested, exceeds ANSI A118.10 and A118.12 specification standards. Listed with IAPMO (certificate # 10470) for shower pan liners. KEMPEROL® 022 membrane is not intended for exterior applications and UV exposure. The membrane must be covered up with a thin-set or a setting bed and tile within eight days of application.

ORDERING INFORMATION

KEMPEROL® 022 work pack:

Item#:	Size:
601-78-120	2.21 gal (8.37 L) • 12 kg
601-78-055*	1.14 gal (4.32 L) • 6 kg

**Item discontinued*

500 Fleece Reinforcement:

Item#:	Size:
112-115-01	41.3" Wide
112-115-02	27.6" Wide
112-115-03	6" Wide

YIELD

500 FLEECE: 60 ft² (5.6 m²) per 12 kg work pack

NOTE: All yields are approximate and may vary depending upon smoothness and absorbency of substrate.

PRODUCT INFORMATION		
Membrane Color	Stone Gray	
Physical State	Cures to solid	
Short-Term Temperature Resistance	250 °C / 482 °F	
Application Temperature*	Between 50 °F (10 °C) - 95 °F (5 °C)	
Usage Time*	25 minutes	
Rainproof After*	1 hours	
Solid To Walk On After*	16 hours	
Water / EFVM Test*	16 hours	
Apply Thinset / Adhesive After*	16 hours	
Temperature Resistance	158 °F (70 °C)	
<small>* Values obtained at 73°F, 50% relative humidity, may vary depending upon air flow, humidity, & temperature.</small>		
SUSTAINABILITY INFORMATION		
% Bio-Based Material	0%	
Recycled Content % (post / pre)	0 / 0	
Manufacture Location	Buffalo, NY	
CODES & APPROVALS		
MEMBRANE PROPERTIES		
PHYSICAL PROPERTY	TEST METHOD	VALUE
Thickness (500 Fleece)	ASTM D5147	40 mils
Fungus Resistance	A118.10	Pass
Seam Strength	ASTM D751	113 lbs. / 2" width
Breaking Strength	ASTM D751	447 psi
Dimensional Stability	ASTM D1204	Pass
Waterproofness	ASTM D4068	Pass
Shear Strength (4 Weeks)	ASTM C482	106 psi
Shear Strength (100 Day Water Immersion)	ASTM C482	60 psi
VOC Content	Method V1.2	35 g/L
CDPH Standard	Method V1.2	Pass
TVOC Concentration	Method V1.2	≤ 0.5 mg / m ³
Hardness	ASTM D2240	Shore A: 50
Elongation	ASTM D751	40%
Robinson Floor Test	ASTM C627	14 Cycles - Extra Heavy Duty
Water Vapor Transmission	ASTM E96	0.1 Perms
Water Vapor Transmission (Using KEMPERTEC® EP5 Primer with KEMPEROL® 022)	ASTM E96	0.0 Perms
System Crack Resistance	A118.12	1/16"

STORAGE

Review Safety Data Sheets before handling, available online at www.kempersystem.com. Always store in a cool and dry location. Do not store in direct sunlight or in temperatures below 50 °F (10 °C) or above 80 °F (27 °C). Approximate shelf life 24 months with proper storage. For best use, 24 hours before application, the material is to be acclimated at temperatures between 65-70 °F (18-21 °C).

SURFACE PREPARATION

All surfaces must be free from gross irregularities, loose, unsound or foreign material such as dirt, water, grease, oil, release agents, lacquers, or any other condition that would be detrimental to adhesion of the primer and membrane. This requires careful preparation of existing horizontal and vertical substrates; cracks are filled, expansion joints are prepared, flashings are removed or modified, and termination points are determined. Substrates and penetrations are prepared to rigorous industry standards, and may require scarifying, sandblasting or grinding in some cases to achieve a suitable substrate. Ensure new cement board and plywood has dried prior to applying the resin. All cover board and plywood joints, and pipe penetrations should be treated with KEMPERTEC® Joint Sealant and stripped with the 6" wide KEMPEROL® 500 fleece and KEMPEROL® 022 resin. KEMPEROL® 022 may be applied when the substrate temperature is a minimum of 5 °F (3 °C) above the dew point.

NOTE: Prior to opening containers, wear appropriate safety glasses and protect hands and wrists by wearing long sleeves and gloves.

PRIMING

KEMPERTEC® EP5 primer should be applied on concrete substrates if a zero-perm rating is required. Review KEMPERTEC® EP5 Primer TDS for application instructions.

MIXING OF RESIN

STEP 1: Premix resin Component A thoroughly with a spiral agitator.

STEP 2: Pour Component B into Component A and mix the components for approximately 2 minutes with a clean spiral agitator on low speed without creating any bubbles or streaks. The resin solution should be a uniform color, with no light or dark streaks present. **NOTE: DO NOT break down work packs into smaller quantities – mix the entire work pack.**

APPLICATION

STEP 1: After the resin is mixed, using a KEMPEROL® roller nap or brush apply 2/3 of the resin liberally and evenly onto the surface in even stroke.

STEP 2: Roll the KEMPEROL® 500 fleece directly into the resin, avoiding folds and wrinkles. Use the roller or brush to work the resin into the fleece, saturating from the bottom up. White spots are indications of unsaturated fleece or lack of adhesion. It is important to correct these areas before proceeding.

STEP 3: Add the remaining 1/3 of the resin to the top of the fleece and finish the fleece's saturation. Rolling the final coat into the fleece will result in a glossy appearance. Ensure a two inch (5cm) overlap between rolls of fleece. White spots are indications of unsaturated fleece or lack of adhesion. It is important to correct these faults before the resin cures.

STEP 4: While the resin is still wet broadcast KEMPEROL® Surfacing Sand #0 / 18 (0.5 – 1.2 mm) on both horizontal and vertical surfaces at the approximate rate of 30 lbs. / 100 ft² (1.5 kg / m²).

NOTE: KEMPEROL® 022 membrane does not require a protective alkalinity barrier.

STEP 5: Commence the tile adhesive application once the KEMPEROL® 022 membrane has cured. Follow the tile adhesive manufacturer's application guidelines.

DISPOSAL

Cured KEMPEROL® 022 resin may be disposed of in standard landfills. This is accomplished by thoroughly mixing all components. Uncured resin is considered a hazardous material and must be handled as such, in accordance with local, state and federal regulations. Do not throw uncured resin away.

DISCLAIMER

NO WARRANTY, EXPRESS OR IMPLIED, IS MADE IN THIS DOCUMENT. THE PRODUCT IS NOT CLAIMED TO BE MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE. User and certified Kemper System America, Inc. (KSA) applicators determine suitability only. See individual KSA product data sheets, SDS sheets, guide specifications and details for complete information regarding the suitability, application, and handling of KSA products.