

Technical Data Sheet

KEMPEROL® 022



Pack includes:
Component A: Base Resin, Component B: Hardner

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.

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.

Limitations

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 (8) days of application.

KEMPEROL® 022 may be applied when the ambient temperature is 50° F (10° C) and rising, and the substrate temperature is a minimum of 5 degrees above the dew point. The maximum application temperature is approximately 95° F (35° C).

Yield

KEMPEROL® 500 fleece: 30 s.f. (2.8 kg/m²) per 6 kg work pack
Note: All yields are approximate and may vary depending upon smoothness and absorbency of substrate.

Storage

Always store in cool and dry location. Do not store in direct sunlight or in temperatures below 35° F (1.7° C) or above 80° F (27° C). Approximate shelf life 12 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).

Precautions

Review Safety Data Sheets before handling, available online at kempersystem.net.

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 that new cement board and plywood has had an opportunity to dry before applying 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 022 resin.

Mixing of Resin

| Sustainability Information | |
|---------------------------------|------------------|
| Rapidly renewable resource | 0% |
| Recycled content % (post / pre) | 0 / 0 |
| Manufacture location | Buffalo, NY, USA |

Note: Prior to opening the containers of KEMPEROL® 022 Resin wear appropriate safety glasses and protect hands and wrists by wearing gloves.

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

Step 2: Pour resin Component B into Component A and mix the components for approximately 2 minutes with a clean spiral agitator on slow 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 units into smaller quantities - mix the entire work pack.

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. Covering one working area at a time, between 10 - 15 ft².

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. Roll this final coating into the fleece, which will result in a glossy appearance. Ensure a 2" (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 (0.4-0.8 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: Once the Kemperol 022 membrane has cured the tile adhesive application may begin. Please follow the tile adhesive manufacturer's application guidelines.

Application

Disposal

Cured 022 resin may be disposed of in standard landfills. This is accomplished by thoroughly mixing all components. Note: Uncured 022 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.

Ordering Information

KEMPEROL® 022 work pack
 Item#: 601-78-055 Size: 6 kg work pack

500 Fleece Reinforcement
 Item #:
 112-115-01 41.3" Wide
 112-115-02 27.6" Wide
 112-115-03 6" Wide

| Membrane Properties | | |
|--|-------------|--------------------------------|
| Physical Property | Test Method | Values |
| Color | | Stone Gray |
| Physical state | | Cures to Solid |
| Nominal thickness | | 40 mils |
| Fungus resistance | A118.10 | Pass |
| Seam strength | D751-06 | 113 lbs / 2" width |
| Breaking strength | D751-06 | 445 psi |
| Dimensional stability | A118.10 | Pass |
| Waterproofness | A118.10 | Pass |
| Shear strength (4 weeks) | A118.10 | 106 psi |
| Shear strength (100 day water immersion) | A118.10 | 60 psi |
| VOC content | | 35 g/l |
| Hardness | C661 | >40 |
| Elongation | D751-06 | 40% |
| System performance | C627 | 14 Cycles - Extra Heavy Rating |
| Anti-fracture crack spanning | | 1/16" |
| Usage time* | | 25 mins |
| Moisture resistant* | | 1 hour |
| Water/EFVM Test* | | 16 hours |
| Apply thinset* | | 16 hours |
| Temperature resistance | | 158 °F (70°C) |

* values obtained at 73°F, 50% relative humidity, may vary depending upon air flow, humidity and temperature.