

## Product Information

### KEMPERTEC® EP5 Primer

**Two component work pack includes:**

**Component A: Base Resin, Component B: Hardener**

<b>Product Description</b>	<b>KEMPERTEC® EP5 Primer</b> is a quick-curing, penetrating, high bonding, primer used between acceptable prepared substrates and KEMPEROL® cold liquid-applied reinforced membrane and coating systems.
<b>Composition &amp; Materials</b>	KEMPERTEC® EP5 Primer is a solvent free, 2-part, cold liquid-applied epoxy resin.
<b>Use</b>	KEMPERTEC® EP5 Primer is used to prime a wide range of substrates including bitumen roofing, concrete, brick, plywood, steel, glass and other substrates. Adhesion test is required to confirm adequate adhesion for aluminum, lead, copper, or zinc. Please see the Substrate Primer Selection Table for a complete list. Primer is also used to provide alkalinity protection for Kemperol 2K-PUR membrane prior to concrete or cementitious mortar/adhesive application.
<b>Limitations</b>	Primer may be applied only when the ambient temperature is 41 °F (5 °C) and rising, and the substrate temperature is a minimum of 5 degrees above the dew point. Kemperol membrane must be applied to primer within 8 days of primer application. Primer exposed for more than 8 days must be re-primed in accordance with KSA Technical Department requirements.
<b>Yield</b>	85 ft <sup>2</sup> (7.9m <sup>2</sup> ) per 5 kg work pack. <i>Note: All yields are approximate and may vary depending upon smoothness and absorbency of substrate.</i>
<b>Storage</b>	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 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).
<b>Precautions</b>	<b>Review Safety Data Sheets before handling, available online at <a href="http://kempersystem.net">kempersystem.net</a>.</b>
<b>Surface Preparation</b>	All surfaces must be free from gross irregularities, loose, unsound or foreign material such as dirt, ice, snow, water, grease, oil, release agents, lacquers, or any other condition that would be detrimental to adhesion of the primer and substrate. 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 SSPC-SP3 standards.  New concrete shall have cured a minimum of 28 days in accordance with ACI-308, or as approved by the KSA Technical Department. Where required, concrete shall be abrasively cleaned in accordance with ASTM D4259 to provide a sound substrate free from laitance. Achieve an open concrete surface in accordance with ICRI surface profiles CSP 3-5 by means of scarifying, sand-blasting or grinding in some cases to achieve a suitable substrate.  Concrete shall be dry and confirmed by measuring the moisture level with the following methods: <ul style="list-style-type: none"> <li>• ASTM F2170: Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes. A 75% or greater is an indication of high moisture content and will require additional priming.</li> </ul>

- ASTM F1869: Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. A maximum requirement is 3 lb/1,000 ft<sup>2</sup>/24-hour period.
- ASTM D2216: Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass. A minimum requirement is 6% moisture content by weight.
- ASTM F2659: Standard Guide for Preliminary Evaluation of Comparative Moisture Condition of Concrete, Gypsum Cement and other Floor Slabs and Screeds Using a Non-Destructive Electronic Moisture Meter. Tramex Concrete Moisture Encounter Meter CME4 may be used to determine the moisture content of the top 3/4" of the concrete slab **only**. A minimum requirement is a 5% reading.

Sustainability Information	
Rapidly Renewable Resource	0%
Recycled Content % (post / pre)	0 / 0
Packaged Location	Buffalo, NY, USA

Primer Properties	
Physical Property	Value
Color	Translucent/Amber
Physical State	Cures to solid
VOC Contents	8 g/l
Usage Time*	20 minutes
Water Resistant After*	3 hours
Cures After*	4 hours
Apply Membrane/Coating After*	4 hours

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

*Note: Prior to opening the containers of KEMPERTEC® EP Primer, wear appropriate safety glasses and protect hands and wrists by wearing gloves.*

## Mixing of Primer

**Step 1:** Premix 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 slow speed without creating any bubbles or streaks. DO NOT AERATE. DO NOT THIN PRIMER. The primer 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.**

## Application

After mixing, apply the primer with a roller or brush evenly onto the surface in a cross directional method, or utilizing the pour and spread method to fully cover the substrate. Porous substrates may require an adjustment to the primer application rate or multiple coats to achieve proper pore saturation.

In warm climates, higher contents of moisture or vapor within a concrete substrate may cause pin-holing of the primer due to vapor drive. Application of primer during a later portion of the day, when temperatures subside can improve this condition. Where required, a second squeegee application of sand/primer slurry may be utilized. The primer slurry mixing ratio should be 25 lbs of Kemperol® Surfacing Sand and 12.5 lbs of Kemperol® Mixing Sand per 5 kg unit of primer.

After applying the primer, immediately broadcast Surfacing Sand (0), #18, (0.5 – 1.2 mm) to refusal, at the approximate rate of 50 lbs./100 ft<sup>2</sup>. (2.4 kg/m<sup>2</sup>). Allow to set approximately 4 hours prior to application of the KEMPEROL® membrane.

Note: KEMPEROL® membrane may be applied when the primer is completely dry and without tack. Do not apply KEMPEROL® membrane to tacky or wet primer.

## Alkalinity Barrier

KEMPERTEC EP Primer is used as an alkalinity barrier/adhesion key over completed membrane and flashing systems. Refer to specific application procedures and project requirements.

## Disposal

Cured KEMPERTEC® EP5 Primer may be disposed of in standard landfills. This is accomplished by thoroughly mixing all components. Note: Uncured KEMPERTEC® EP5 Primer 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

KEMPERTEC® EP5 Primer Work pack:

Item #:	Size:
520-00-033	.25 US GAL (2.83L) • 1 kg
520-00-055	1.18 US GAL (4.7L) • 5 kg

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