

## KEMPEROL 2K-PUR waterproofing



### Uses

- For the waterproofing of surfaces, for connections and details in combination with KEMPEROL Fleece
- As a waterproofing system under tarmac layers
- Suitable for indoor and outdoor applications
- For new buildings and repair work
- Can be applied to practically any substrate

### Characteristics

- Odor-neutral
- Cold to process
- Water vapor diffusible
- Crack-bridging
- Root-resistant according to FLL test
- Accessible for maintenance purposes
- Solvent-free
- UV-resistant
- Environmentally declared according to valid international standards (EPD)
- 2-component
- CE marking
- Red algae resistant
- Resin base: Polyurethane resin
- Radon-resistant (in combination with KEMPERTEC EP5 primer)

### Pack size

10 \* 1 kg sachets in a box

2 \* 2,5 kg sachets in a plastic bucket

12,5 kg in a container

### Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

### Usage guide

depending on the nature of the substrate: at least 3,0 kg/m<sup>2</sup> depending on the layer thickness (see Technical Information TI 03 - Layer thicknesses according to regulations).

### Properties

Form	Liquid
Standard colour	Yellow-grey Anthracite
Special colours	On request
Workability time*	approx. 30 min
Rainproof after*	approx. 2 h
Can be walked on after*	approx. 16 h
Cured after*	approx. 72 h**
Further coating after*	approx. 16 h****
with mastic asphalt after	approx. 16 h
Short term temperature resistance	- 250 °C

\* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

\*\* with KEMPERDUR Surfings, see corresponding Technical Data Sheet.

### CE marking

Component to 2	EAD 030350-00-0402
Water vapour diffusion factor $\mu$	~ 3100
Resistance to wind loads	>= 50 kPa
External fire performance	B <sub>ROOF</sub> (t1) **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4

Highest surface temperature TH4

\*\* Classification in accordance with EN 13501-5  
\*\*\* Classification in accordance with EN 13501-1.

## Application

### Preparing the substrate

Substrates must be dry (residual moisture in concrete in the upper 2 cm < 5%), capable of withstanding loads and free from materials that may hinder adhesion, and must be appropriately prepared.

On some substrates, no priming of the full surface is necessary. Generally, the priming recommendations for KEMPEROL 2K-PUR Waterproofing have to be observed.

Only apply when the substrate and ambient temperatures are  $\geq +5$  °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

### Mixing

#### Sachet

Remove the sachet from the aluminium packaging. Knead component A thoroughly. Open the centre seam which divides the two components and mix components A and B.

Knead the sachet rapidly (approx. 1 min.) until you have a homogeneous and streak-free Sealant mixture.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

At temperatures below 10 °C, the KEMPEROL 2K-PUR Speedshot must be added and stirred.

#### Plastic container

KEMPEROL 2K-PUR Waterproofing component A must be stirred thoroughly. At temperatures below 10 °C, the component A of the KEMPEROL 2K-PUR Speedshot for KEMPEROL 2K-PUR Waterproofing must be added and stirred. Add component B to component A and mix until you have a streak-free mixture.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

### Use

Apply approx. 2/3 of KEMPEROL 2K-PUR Waterproofing, roll in the KEMPEROL 165 fleece and embed it using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining 1/3 of KEMPEROL 2K-PUR Waterproofing onto the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

The thickness of the membrane needs to meet minimum requirements defined in the European Technical Approval ETA. National regulations must be followed.

Avoid applying the material beyond the area covered by the fleece.

### Alkaline protection

The sealant is only conditionally resistant to alkalis. Therefore, if long-term exposure is expected KEMPERTEC EP Primer, KEMPERTEC EP5 primer or KEMPERTEC AC Primer applied to the sealant and scattered with KEMCO NQ 0712 Natural Quartz (see Technical Information TI 15- Alkalinity).

### Work interruption and further coating

The time it takes for further coating is shortened by the addition of KEMPEROL 2K-PUR Speedshot. Standing time greater than 14 days: Sanding the existing work area with sandpaper (P80 - P100).

### PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

### Note

Please consider the following technical information:

- TI 03 - layer thicknesses according to guidelines
- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

### Important notes

The applicable "rules of application" in its current version as well as the "standard rules of technology" and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the

workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

### **Disposal**

Comp. A + B (mixture)	liquid	EAK 08 04 09
Comp. A + B (mixture)	cured	EAK 17 02 03

### **GISCODE**

PU40

### **General information**

Changes to the colour caused by weather conditions or UV rays do not influence the technical parameters. The times given above are reduced with higher and increased with lower ambient and substrate temperatures.

No substances of other systems may be mixed into the products of the KEMPER SYSTEM.

Only for commercial use.

Our technical data sheets / technical information and application instructions reflect the current level of knowledge in our company and the experience with our products. In each case, the new edition supersedes the previous technical information and renders it invalid. It is therefore necessary that you always have to hand the current code of practise. The latest version can be retrieved from the KEMPER SYSTEM Login section. When using our products, a detailed, object-related and qualified inspection is required in each individual case in order to determine whether the product and /or application technology in question meets the specific requirements and purposes. We are liable only for our products being free from faults, and this only if our relevant product has been used and applied according to the instructions in our technical data sheets. Correct application of our products therefore falls entirely within the scope of liability and responsibility of the user (contractor). Our products are sold exclusively on the bases of our conditions of sale and delivery.

Issued: Vellmar, 2023-03-30