

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

Features

- Odourless
- Cold applied
- Water vapour permeable
- Crack bridging
- Root resistant according to FLL-testing
- Can be walked on for maintenance
- Solvent-free
- UV resistant
- Environmental Declaration in accordance with valid international standards (EPD)
- 2-component
- CE marking
- Resin base: Polyurethane resin
- Resistant to radon (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/m² 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 |

** with KEMPERDUR Surfacing, see corresponding Technical Data Sheet.

Test results according to ETAG 005

| | |
|-------------------------------------|--------------------------|
| Component to 2 | ETA 03/0044 |
| Water vapour diffusion factor μ | ~ 3100 |
| Resistance to wind loads | >= 50 kPa |
| External fire performance | B _{ROOF(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

The substrate must be dry (in concrete, the residual moisture in the upper 2 cm must be < 5 %), sound and free from any material that would hinder adhesion.

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 Waterproofing 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 waterproofing provides limited alkaline resistance. Therefore, if a sustained load is expected, apply KEMPERTEC EP Primer, KEMPERTEC EP5 primer or KEMPERTEC AC Primer to the waterproofing and scatter with KEMCO NQ 0712 Natural Quartz (refer to Technical Information TI 15 - Alkalinity).

Interruption and further processing

The time until the next coat can be applied can be shortened by adding KEMPEROL 2K-PUR Speedshot. Interruptions of more than 14 days: Sand the surface of the previously coated 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, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

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.

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