



## Priming Recommendation

Published 05/2007

### KEMPEROL® 1K-PUR Waterproofing

This table represents a guide for the user and should be regarded only as a recommendation. Depending on the building, it may be necessary to carry out suitability tests (individual testing), because the overall structure must always be considered. All substrates must be evenly solid and free of separating substances (oil, separating agents, free granules - see also TI 21). Other substrates not listed here must always be checked with regard to their adhesion performance.

Substrate	KEMPEROL® EP- / EP5- Primer	KEMPEROL® D- / R- Primer	KEMPEROL® FPO-Primer	KEMPEROL® 1K-Primer
Bitumen roof sheet (V 13, V 60, G 200, PYE (SBS))	▲ <sup>1</sup>	▲		▲
APP-Bitumen roof sheet, granulated	Indiv. Testing	Indiv. Testing	Indiv. Testing	Indiv. Testing
Asphalt, weathered	▲	▲		
Plastic sheets (EPDM, ECB, PVC, PE, PP, PIB, EVA)	Indiv. Testing	Indiv. Testing	Indiv. Testing	Indiv. Testing
FPO- or TPO-Plastic sheets			▲ <sup>1</sup>	
Fibre-cement sheets	▲ <sup>1</sup>	▲		
Clinker, Bricks, visible brickwork stones (grinded)	▲ <sup>1</sup>	▲		
Concrete, screed	▲ <sup>1</sup>	▲		
Plastic-modified screed and mortar (PCC)	▲ <sup>1</sup>	▲		
Stones for construction (lightweight, gas or pumice concrete, cement and calcareous sandstone)	▲ <sup>1</sup>	▲		
Glass (uncoated) - MEK cleaned	▲ <sup>1</sup>	Indiv. Testing		
Zinc, galvanised steel		▲ <sup>1,2</sup>		
Copper, lead	▲ <sup>1,2</sup>	▲ <sup>1,2</sup>		
Steel, special steels (V2A, V4A), Aluminium	▲ <sup>1,2,3</sup>	▲ <sup>2,3</sup>		
Insulating materials (polystyrene, rock wool)	Partition layer	Partition layer		Partition layer
Insulating materials (polyurethane)	▲ <sup>6</sup>	▲ <sup>6</sup>		Partition layer
Wood panels, plywood, chipboard, OSB	▲ <sup>6</sup>	▲ <sup>6</sup>		

<sup>1</sup> If there are special requirements and environments (wind suction, small connections etc.), the primer with this mark should be selected.

<sup>2</sup> Mechanical pre-treatment and cleaning with KEMPEROL Cleaning Agent MEK results in an improvement in the adhesion properties.

<sup>3</sup> Low adhesion - additional mechanical fastening is recommended.

<sup>6</sup> Partition layer required!

When using this priming table, it is necessary to follow KEMPER SYSTEM preparation guidelines and technical advice. Please observe our warranty clause for application-related consultation.



### **Working time – pot life:**

The pot life of a reactive material denotes the length of time for which the product remains usable. It is also occasionally referred to as "usable life". It is the time between beginning to mix a multi-component product (or from the moment of opening the container in the case of a single-component product) and the end of its usability, in other words the length of time during which the substance can still be "taken out of the pot". The end of the pot life is usually indicated by a noticeable rise in the viscosity (increase in stickiness), which prevents further proper use of the product.

Pot life and working time are generally not the same thing for our products!

The reason for this is that the pot life is determined by means of a viscometer upon reaching a defined viscosity, but this is greater than the working time relevant in practice.

Quite obviously, a change in the viscosity has a considerable influence on the penetration and saturation behaviour (with respect to the substrate or fleece). At the end of the pot life the viscosity of a product is so high that it is no longer possible to use it properly or to achieve an adequate bond with the substrate. Therefore, our working times are approx. 3–5 minutes shorter than the pot lives as measured.

As a rule of thumb, a product whose viscosity is clearly greater than that of liquid honey (~ 10000 mPas) should no longer be used.

### **Additional covering:**

This specifies the minimum length of time before a subsequent coat or wearing course can be applied. This length of time is determined by an adequate strength or degree of curing being achieved but also by the release (evaporation) of any solvents present in the product. Depending on the weather conditions, any additional covering should be applied within 14 days.

### **Sanding:**

Sanding of two-component primers is generally to be recommended. And dusting is essential for all products based on epoxy resin (KEMPEROL® EP primer, KEMPEROL® EP5 primer). Sanding the primer with natural quartz (500–1000 g/m<sup>2</sup>) achieves a surface with appropriate roughness that ensures an optimum adhesive bond with the following layer.

Another reason for sanding is to protect the primer against UV radiation, especially when the work has to be interrupted for a longer period (> 14 days).

### **Products:**

KEMPEROL® primers are designed for ageing resistance and they are not usually resistant to UV radiation, KEMPEROL® waterproofing products are resistant to ageing and UV radiation, and our decorative KEMPERDUR® products are designed to ensure UV resistance and colour fastness.

### **UV radiation resistance**

The ageing resistance with respect to light (UV radiation) in accordance with ETAG 005 has been verified for our waterproofing products.

### **Colour fastness:**

The durability and constancy of the colour when exposed to (UV) light and environmental influences ("non-fading").

### **Yellowing:**

As no non-fading raw materials are used in our waterproofing products, "yellowing" is possible depending on the degree of weathering and the effects of UV radiation, but this does not impair the function of the waterproofing.