



# KEMAPOX LF

## Acid-resistant epoxy adhesive and joint grouting compound

- ▶ Resistant to various acids and solutions
- ▶ Pot life approx. 45 minutes at +23 °C
- ▶ Suitable for sewing cracks



**PRODUCT DESCRIPTION** 2-component acid-resistant epoxy adhesive and joint grouting compound for joints between 1-15 mm wide.

**FIELD OF USE** For adhesion and joint grouting of floor and wall tiles in interiors and exteriors. It is used in food industry and chemical industry, for protection of tailing ponds, in hospitals, for swimming pools and sanitation, for terraces and balconies and underfloor heating. Suitable also for sewing cracks on horizontal and vertical surfaces.

Color: E10 – grey, E60 – white

- PRODUCT PROPERTIES**
- Resistant to various acids and solutions
  - Pot life approx. 45 minutes at +23 °C
  - Suitable for sewing cracks

## PRODUCT DATA

### BASIC INFORMATION

**Appearance** In 4 available colours two-part epoxy adhesive and grouting compound

**Packing** 5 kg in a plastic bucket (set of component A + component B)

**Storage and expiration date** Minimum 24 months from date of production if stored properly in undamaged original sealed packaging in dry and cool conditions. Date of production is printed on packaging.

### TECHNICAL DATA

**Type of product** Two part epoxy adhesive and grouting compound

**Mix consistency** Creamy

**Specific gravity of mix** 1,55 kg/dm<sup>3</sup>

**Permitted application temperatures** From +12°C a +30°C

**Recommended application temper.** From +18°C +23°C

**Shear adhesion strength** Initial > 2 N/mm<sup>2</sup> EN 12003  
 After immersion in water > 2 N/mm<sup>2</sup>  
 After thermal shock > 2 N/mm<sup>2</sup>

**Abrasion resistance** < 250 mm<sup>3</sup> EN 12808-2

**Mechanical flexural strength after 28 days** > 30 N/mm<sup>2</sup> EN 12808-3

**Mechanical compressive strength after 28 days** > 45 N/mm<sup>2</sup> EN 12808-3

**Shrinkage** < 1,5 mm/m EN 12808-4

**Water absorption after 4 hours** < 0,1 g EN 12808-5

**Temperature of use** From -20°C to +100°C

### CHEMICAL RESISTANCE TABLE

The table is a summary of the chemical resistance proof made according to regulation EN 12808

Name	Conc. %	Continuous use	24 Hours	7 Days	14 Days	28 Days	Intermittent use
<b>Acids</b>							
Acetic Acid	2,5		+	+	+	+	+
	5		+	+	+	(+)	+
Hydrochloric Acid	37		+	+	+	(+)	+
Citric Acid	10		+	+	+	+	+

Lactic Acid	2,5		+	+	+	+	+
	5		+	+	+	+	+
	10		+	+	+	+	+
Nitric Acid	25		+	+	+	+	+
	50		+	-	-	-	+
Oleic Acid Pure			+	-	-	-	+
Vitriol	1,5		+	+	+	+	+
	50		+	+	+	+	+
	96		-	-	-	-	-
Tannic Acid	10		+	+	+	+	+
Tartaric Acid	10		+	+	+	+	+
Oxalic Acid	10		+	+	+	+	+
<b>Alkalis</b>							
Ammonia in solution	25		+	+	+	+	+
Caustic Soda	50		+	+	+	+	+
Sodium Hypochloride Conc. Cl active	> 10		+	+	+	(+)	+
Caustic Potash	50		+	+	+	+	+
Sodium Bisulphite	10		+	+	+	+	+
<b>Concentrated solutions 20°C</b>							
Iposulphite Sodium			+	+	+	+	+
Calcium Chloride			+	+	+	+	+
Sodium Chloride			+	+	+	+	+
Ferric Chloride			+	+	+	+	+
Sugar			+	+	+	+	+
<b>Oils and Fuels</b>							
Petrol, Fuels			+	+	+	(+)	+
Turpentine			+	+	+	+	+
Gas Oil			+	+	+	+	+
Olive Oil			+	+	+	+	+
Lube Oil			+	+	+	+	+
<b>Solvents</b>							
Acetone			+	-	-	-	+
Ethylene Glycol			+	+	+	+	+
Glycerine			+	+	+	+	+

Ethyl Alcohol			+	+	(+)	+	+
Solvent Petrol			+	+	+	+	+

**KEY:**

+ = Excellent resistance

(+) = Good resistance

- = Poor resistance

## INSTRUCTIONS FOR USE

**CONSUMPTION** 0,6-1,4 kg/m<sup>2</sup> for adhesion of tiles (thickness of 1 mm)

0,4-1,2 kg/m<sup>2</sup> for grouting, depends on the width and depth of the joint

Tile size (cm)	Joint width (mm)	Consumption (kg/m <sup>2</sup> )
Clinker 12x24x1,2 25x25x1,2	5-8-10	1,16-1,86-2,33 0,74-1,19-1,49
10x10x0,6 15x15x0,6	3-4-6	0,56-0,74-1,12 0,37-0,50-0,74
15x20x0,6 25x25x1,2	3-4-6-8	0,33-0,43-0,65-0,87 0,45-0,60-0,89-1,19
25x33x0,8 33x33x1	4-8-10	0,35-0,70-0,87 0,38-0,75-0,94
30x45x1 45x45x1,2	4-10	0,34-0,86 0,33-0,83
50x50x1,2 60x60x1,2	6-10	0,45-0,74 0,37-0,62

**BASE** Grouting can be started when adhesive or mortar for setting tiles is complete hardened. Consider times in technical data sheets of adhesives. The joints must be clean, free of powder and empty to at least 2/3 of the tile thickness. Any adhesive or mortar that has squeezed up inside the joints must be removed, when still is in fresh condition.

**MIX TIME** Pour part B (catalyst) contained in the small bucket onto part A (paste). Be sure to pour on the entire contents of the catalyst, using a steel spatula to scrape the sides and bottom of the container. Preferably mix using an electric drill equipped with mixing paddle until a uniform, lump-free mix is obtained. Hand mixing is not recommended. The two parts are pre-batched in their packaging, avoiding all risk of mixing errors.

**INSTALLATION** Introduce the paste into the joints using a special rubber float. Remove excess product using the rubber float. The product's pot life and hardening time is strongly dependent on the ambient temperature. The ideal temperature for application is between +18°C and +23°C. In these conditions the product is an easily workable smooth mortar, with a pot life of about 45 minutes. It is ready for foot traffic after 24 hours. At a temperature of +15°C it takes three days before the surface is ready for foot traffic. The floor is ready to use and resistant to chemicals after five days at a temperature of +23°C and after 10 days at a temperature of +15°C. At temperatures of between +8 and +12°C, the product is very dense and difficult to apply. The hardening time is also lengthened considerably. Do not add water or solvents to improve workability. In hot weather it is advisable to apply the product to the floor as quickly as possible so as not to further shorten pot life due to the reaction heat in the container.

**CLEANING AND FINISHING** The grout work must be cleaned and finished while the product is still wet and in any case in the shortest possible time. Take care not to remove product from the joints or leave stains on the tile surface.

#### CLEANING OF THE SURFACE

First sprinkle clean water over the grouted surface. If necessary, perform initial cleaning using a float equipped with a moistened white felt. Make circular movements in both clockwise and anticlockwise directions in order to seal perfectly the sides of the tiles and to remove excess grout from the surface of the tiles. Now perform a second pass with a sponge KEMAPOX WHIPE in order to obtain a smooth, closed surface and to remove completely the product from the surface of the tiles, without removing it from the joints, as well as to dry off the excess of water. When the felt and sponge are impregnated with resin and can no longer be used, they must be replaced.

**TOOL** The trowel notch.

**TIME BEFORE** Floor tile installation with normal-setting adhesive: 24 hours

**GROUTING** Floor tile installation with fast-setting adhesive: 4 hours

Floor tile installation with mortar: 7-10 days

Wall tile installation with normal-setting adhesive: 6-8 hours

Wall tile installation with fast-setting adhesive: 4 hours

Wall tile installation with mortar: 2-3 days

**OPEN TIME** About 45 minutes at T=+23°C

**COAGULATION** Product appropriate for (+23°C):

Walk on time after 24 hours.

Ready for use after 5 days.

## LIMITATIONS

- WARNINGS**
- If possible, apply the product at temperatures between +18°C and +23°C.
  - Remove excess product from the tile surface rapidly because once hardened it will have to be removed mechanically, seriously jeopardising the finished result.
  - Some kinds of tiles (e.g. polished porcelain tile) and natural stone have rough, microporous surfaces, making them susceptible to staining and very difficult to clean. In this case preliminary test applications should be performed. Avoid using grouts with contrasting or excessively dark colours.
  - The product must not be used for grouting tanks containing aggressive substances with which only occasional contact is permitted (see chemical resistance table).
  - Do not use for grouting surfaces in contact with oleic acid such as olive oil mills and ham factories.
  - Do not mix the product with water or solvents.
  - Do not use for applications not stated on this technical sheet.

**Recommendation:** Remains of the unhardened/unset material have to be removed in accordance with the legislation.

**Data source:** All technical data in this technical sheet was obtained by laboratory research. Actual data may differ due to different working conditions.

**Local restrictions:** Due to specific local regulations the installed product can differ from country to country. For exact instructions for use a country specific technical sheet should be obtained.

## SAFETY DATA

Safety information according to 1907/2006/EC (REACH), Article 31

### Part A

Xi-Irritant

R36/38 - Irritating to eyes and skin.

R43 - May cause sensitisation by skin contact.

S24 - Avoid contact with skin.

S26 - In case of contact with eyes, wash immediately with plenty of water and seek medical advice.

S28 - After contact with skin, wash immediately using a suitable product.

S37/39 - Wear suitable gloves and protect face and eyes.

### Part B

C-Corrosive

R22 - Harmful if swallowed.

R34 - Causes burns.

R43 - May cause sensitisation by skin contact.

S24 - Avoid contact with skin.

S26 - In case of contact with eyes, wash immediately with plenty of water and seek medical advice.

S28 - After contact with skin, wash immediately using a suitable product.

S37/39 - Wear suitable gloves and protect face and eyes.

More data on storage, handling and use of mixture can be found in the safety sheet which contains safety, toxicological and ecological data. Warnings on the original packaging should also be considered.

## LEGAL BASE

Information and recommendations related to use of KEMA products are presented in good faith and believed to be correct. The later is based on our knowledge and experience with the products. Information is supplied upon the condition that products are stored and used according to the recommendations and the persons receiving the same will make their own determination as to its suitability for their purposes prior to use. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to Information or the product to which information refers. In no event will KEMA be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information or the product to which Information refers. Nothing contained herein is to be construed as a recommendation to the use any product, process, equipment or formulation in conflict with any patent, and KEMA makes no representation or warranty, expressed or implied that the use thereof will not infringe any patent. All orders fall under current sales and supply conditions. The user should always check the latest technical sheet available upon demand.