

KEMAPUR FILL 1150

Polyurethane resin for connecting elements in construction

- Expand with contact with water
- ▶ Pot life, 40 minutes at +23 °C (100 g)
- ▶ Flexible
- Low viscosity
- Colourless



PRODUCT Elastic, solvent-thinned, 2 component polyurethane injection resin for bonding of construction elements. It is DESCRIPTION permanently elastic and thus allows a permanent crack and joint sealing even in case of movement of the crack.

FIELD OF USE It is used for filling and bonding of dry and wet cracks and construction elements, for solidifying of old buildings and of shattery masonry, for sealing of cracks in basement area and tunnels, ..., onto concrete, coats, isolation, bitumen and plastic substrates, also used in cases where future movements of the building structure cannot be excluded.

- **PRODUCT** Expand with contact with water
- PROPERTIES Pot life, 40 minutes at +23 °C (100 g)
 - Flexible
 - Low viscosity
 - Colourless



PRODUCT DATA		
BASIC INFORMATION	Appearance	Colourless polyurethane system
	Packing	3,5 kg (2,3 kg component A and 1,2 kg component B)
	Storage and expiration date	12 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	Polyurethane flexible system
	Pot life	40 minutes (100 g at +23 °C)
	Mixing ratio	A:B=2,3:1,2 (w/w)
	B component	
	Density	1,23 g/cm ³
	Viscosity (+25°C)	200 mPa.s
	A component	
	Density	0,979 g/cm ³
	Viscosity (+25°C)	780 mPas
	A+B	
	Viscosity at +10°C	2330 mPa.s
	Viscosity at +15°C	1540 mPa.s
	Viscosity at +20°C	1050 mPa.s
Potlife A+B mixed with	out contact with moisture/water:	~ 6 hours (at +20°C)

INSTRUCTIONS FOR USE

CONSUMPTION 0,3-0,5 kg/m⁻, depending on crack width and depth

BASE The cracks must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.



BASE Cracks:

PREPARATION Widen cracks and remove loose and/or crumbly particles from the edges. Then open the cracks with a cut-off wheel up to 1/2 to 2/3 of the thickness of the screed. As preparation for the injection process when injecting cracks horizontal slits are to be cut into the substrate diagonally to the course of the crack. Cut the horizontal slits with a cut-off wheel approx. 10 to 20 cm apart, cut length approx. 10 cm, cut depth approx. 2/3 of the thickness of the screed. Suction clean cracks and slits. WARNING: Take into the consideration the heating installations in screed. Void places:

> Locate voids in the screed slabs by tapping and marking them. In the area around voids drill vertically down to the sound substrate. Depending on the size of the void drill holes at the edges of the hollow zone or in an appropriate grid pattern. Then vacuum off bore dust and position drilling injectors. Depending on the detected void leave two or more drill holes open so that no harmful hydrostatic pressure occurs during the injection. Position of packers:

> Drill into the building component diagonally to the course of the crack using a stone drill corresponding to the diameter of the packer. The drill hole must intersect the crack approximately in the middle of the building component. Position holes alternately on the left and right side of the crack, regards to building component. Vacuum off dust produced during the drilling process and insert packers into the prepared holes. Then trowel cracks to seal the surface.

MIX RATIO A:B=100:40 (rate of components A and B);

MIX TIME The resin typically is thicker and heavier than the hardener, so they don't always blend together too easily. Before blending, mix the components separately to reduce their viscosity and make them easier to blend. After mixing each component for 2 to 3 minutes, place correctly proportioned amounts of component B in component A. Mix for about 11/2 minutes, scrape the sides and bottom of the bucket, and then mix for another 11/2 min until homogenous mixture is reached. When mixing, move the paddle in a circular pattern with an up-and down motion. Before use place the mixture in third container and mix again. The third mixing container must be clean and free of dirt, oil, grease, or other contaminants. Additional mixing is not suppose to be very long-time, to prevent too much air bubbles in mixture.

If smaller quantity of mixture is to prepare, use separate mixing container. Before blending, mix the component for 2-3 minutes separately and then place correctly proportioned amounts of each ingredient in a mixing container. The mixing container, must be clean and free of dirt, oil, grease, or other contaminants. For weighing of smaller amounts use digital weighing machine, with precision +/- 0,01 kg.

MIX TOOL KEMAPUR must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment.

INSTALLATION Filling the cracks onto horizontal surfaces:

Pour KEMAPUR FILL 1150 onto prepared cracks and leave until cracks are fill with resin. Scrape off excessive and/or emerging material from the surface. For bigger holes or cracks use resin with added quartz sand EPOXY SAND ES. Filling the cracks onto vertical surfaces:

In case of vertical cracks diagonally upward always inject from bottom to top. Starting at the lowest packer inject resin KEMAPUR FILL 1150 as long as the filling emerges at the next packer. Continue this procedure in sections from packer to packer up to the packer positioned at the top. During injection the material is gradually pressed into the finest branches of the cracks by pressure and capillary action.

Remove the packers once the product has cured. The drill holes can be filled with appropriate KEMA product.

TOOL For spreading the steel shovel, paint roller or trowel is to used. For vertical surface use low-pressure gun.

TECHNICAL DATA SHEET



CLEANING OF Clean all tools and application equipment with KEMAPOX CLEANER immediately after use. Hardened and/or cured TOOL material can only be removed mechanically.

LIMITATIONS	
BASE TEMPERATURE	+8°C min. / +30°C max.
AIR TEMPERATURE	+8°C min. / +30°C max.
MATERIAL TEMPERATURE	+8°C min. / +30°C max.
WARNINGS	 Freshly applied KEMAPUR resin should be protected from freezing, rain and other weather conditions. DO not use product if temperature is below +8°C. Relative Air Humidity: 80% r.h. max. Store product in dry conditions, protected from direct sun radiation and freezing. For the good quality of the system the suitable and equable temperature and humidity are very important. Recommend application temperature above +15 °C. No special precautions need to be taken at temperatures between +15 °C and + 30 °C.
	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

While dealing with polyurethane, please consider the safety precautions mentioned in the risk and safety phrases. Avoid pollution of the unprotected skin – wash off with warm water and soap, if necessary. Wear protective clothing and use barrier cream before starting your work, please!

Always ensure that all health and safety procedures are in accordance with local and national Government requirements.



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.