

Technical Information Sheet Article No. 0945

Injection Resin EP

Solvent-free, low viscosity, 2-component epoxy resin for friction coupled bonding.

Property profile

Injection Resin EP is a solvent-free, 2-component, low viscosity epoxy resin for the injection of cementitious building materials.

Range of use

This product is used for friction coupled bonding and connecting by injection and for pouring out cracks and voids in concrete. Also for cementing tie rods.

Substrates

Clean the run of the crack by blowing out with oil-free compressed air. On vertical surfaces, the crack is tamped with Repair Mortar EP 2 K. The boreholes for the injection packers should be drilled along both sides of the crack, staggered at intervals half the building element thickness, in an angle of 45° and at a distance of half the building element thickness to the middle of the crack. Borehole depth should be at least 70% of the building element thickness, borehole diameter should correspond to the packers used. Insert packers and fix in place.

Characteristic data of the product

	Comp. A	Comp. B	Mixture
Density (20°C):	1.12 g/cm ³	0.95 g/cm ³	1.05 g/cm ³
Viscosity (23° C):	720 mPas	130 mPas	460 mPas
Viscosity (15° C):	1630 mPas	190 mPas	1180 mPas
Viscosity (8° C):	3700 mPas	550 mPas	2530 mPas
Odour:	neutral	amine-like	slightly amine-like
Hardening conditions:	7 days/23°C		
Compressive strength:	110 N/mm ²		
Tensile strength:	50 N/mm ²		
Expansion:	5 %		
Adhesional strength:	> 3.5 N/mm ² concrete failure		
Tensile bending strength:	70 N/mm ²		
Free shrinkage:	1.346 mm/m		
Course of hardening based on A + D Shore hardness:			
Time	23°C	15°C	8°C
24 h	99/65	72/18	--
48 h	95/73	98/70	--
72 h	97/81	95/75	87/70
168 h	98/84	94/77	89/79

Product data

Mixing ratio:

2.4 : 1 or 100 : 42 parts by weight
2.06 : 1 or 100 : 48.6 parts by volume

Pot-life:

40 min. at 23°C (1 kg mixture)

Higher temperatures and larger amounts reduce, lower temperatures increase working time.

100 g mixture / pot-life and working time until 40°C:

23°C = 42 min.
15°C = 40 min.
8°C = 40 min.

1000 g mixture / pot-life and working time until 40°C:

23°C = 39 min.
15°C = 63 min.
8°C = 131 min.

Working instructions

The two components are packaged in special containers in the proper mixing ratio. The mixture should be produced according to the DBV Code of Practice "The Use of Cold-Cured Resins in Concrete Construction - part 3.2 - Working Cold-Cured Resins on Concrete". The hardener component (B) should be completely added to the resin component (A). For smaller amounts (up to 10 litres), use a mixer on a counter-current principle. Drills with a max. speed of 400 rpm can be used as a drive. The minimum mixing time of 2 minutes should be observed. The larger the amount to be mixed and/or the more viscous the components, the longer must be mixed. Streaks indicate insufficient mixing.

Especially in the case of varying viscous components, the lesser mixed material on the edge and bottom of the container as well as on the mixing tools should be scraped off several times and returned to the mixture. Afterward, the mixture is filled into a separate container and mixed again. It is then ready to use.

The injection material is applied by using an injection pump with manometer and adjustable pressure.

Direction of injection on vertical surfaces:

Injection work should be carried out from the bottom to the top. The next higher packer serves as a pressure release and as a control opening. Work is carried out analogously on horizontal surfaces.

After the injection resin has hardened, remove the packers and close the boreholes with Repair Mortar EP 2 K.

Working Temperature:

Ambient temperature and that of the substrate should not fall below 8°C. Hardening is accelerated at higher temperatures, delayed at lower temperatures.

Tools and cleaning

Drill with a counter-current mixing tool, injection equipment, hand lever pump, percussion drill. Clean tools and any stains immediately while fresh with V 101 thinner. Wear protective gloves!

Packaging, application rate and shelf-life

Packaging:

1 kg and 5 kg tin containers

Application rate:

1.1 kg/litre cavity volume.

Shelf-life:

At least 9 months stored frost-free in original, unopened and unmixed containers.

Safety, ecology, disposal

Further information concerning safety during transport, storage and handling as well as for disposal is found in the latest Safety Data Sheet.

The statements above are compiled from our field of production and according to the latest technological developments and application techniques.

Since application and working are beyond our control, no liability of the producer can be derived from the contents of this information sheet. Any statements made beyond the contents of this information must be confirmed in writing by the producer.

In all cases, our general conditions of sale are valid. With the publication of this Technical Information Sheet all previous editions are no longer valid.



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