

## weber.tec 945

### Injection EP resin

## 2-comp. injection epoxy resin for force-fit injection or grouting of cracks in concrete and masonry

### Fields of application

For monolithic crack injection through boreholes in concrete, like water reservoirs, swimming pools, sewage treatment plants, quay walls, foundations, shafts, all kinds of weight-bearing components of concrete and pre-stressed concrete in bridge and road constructions.

Also for injection or filling of cracks in masonries by pouring.

For use indoors and outdoors.

### Description

**weber.tec 945** is a low-viscosity, solvent-free, 2-component injection resin based on epoxy resin.

### Composition

Epoxy resin

### Main features

- good creeping properties due to low viscosity
- high chemical resistance
- free of non-reactive plasticizers
- excellent adhesion on the crack flanks
- high compressive and flexural strengths after curing
- protects the iron rods of reinforced concrete against water and air ingress, and thus against corrosion
- for use indoors and outdoors

---

## Technical values

---

Curing time:	approx. 3 - 7 days
Application temperature (air and substrate):	+10°C to + 30°C
Flexural strength (7 days):	40 N/mm <sup>2</sup>
Compressive strength:	70 N/mm <sup>2</sup>
Density:	approx. 1.1 kg/dm <sup>3</sup>
Temperature resistance:	up to +90°C
Pot life:	up to 80 minutes at +20°C and for 500 g material
Viscosity:	260 mPA.s
Mixing ratio:	comp. A (resin base) : comp. B (hardener) = 10 kg : 4.6 kg
Clean-up:	thinner <b>weber.sys 992</b>

---

---

## Quality control

---

**weber.tec 945** is subject to a regular quality control.

---

## General notes

---

- Before processing **weber.tec 945**, check the reasons of crack formation and, if necessary, eliminate them in order to exclude a new crack formation in other areas.
  - Larger packagingss and higher temperatures shorten the pot life.
  - All characteristics mentioned in this data sheet refer to a temperature of +20°C without draughts and a relative humidity rate of 50%.
  - For higher injection pressure up to 200 bar use screw packers.
  - For lower injection pressure up to approx. 50 bar use adhesive packers.
- 

## Special notes

---

- Do not add any foreign substances during mixing and application.
  - Wear safety glasses and gloves during processing.
- 

## Substrate preparation

---

- The substrate must be dry, load-bearing, free of grease and oil, and free from all adhesion-impairing particles and substances.
-

- Clean crack areas with a steel brush or a diamond disc approx. 3 - 4 cm on both sides of the cracks.
- Drill holes in an appropriate diameter, depending on the type of packers. The distance between each borehole is 1 -1.5 times the crack depth.
- The injection is done via screw, adhesive or drive-in packers.
- Insert the packers in the right distance.
- Close the cracks between the injection packers with the epoxy resin mortar **weber.rep 766** and allow to harden fully.
- In case of continuous cracks in concrete drill the injection holes on both sides of the crackline and in a staggered manner.
- Adhesive packers are glued with **weber.rep 766**.
- Screw packers are placed into the holes with an angle of inclination of 45° ,

---

## Working instructions

---

### Mixing

- **weber.tec 945** is supplied in 2 pre-mix twin packagings (component A = resin base and component B = hardener) with the specific mixing ratio for use.
- Empty component B totally into component A (upper part of the packaging).
- Mix both components with a slow-speed electric drill and with the stirrer **weber.sys Rührpaddel no. 2** or **no. 8** (according to packaging size) for approx. 2 minutes, until a homogeneous mixture of uniform colour is achieved.
- Care must be taken to ensure that the product is also thoroughly mixed in the corners and at the bottom of the mixing container.

### Application by injection method

- Check compatibility of cracks for injection before starting.
- Blow out packers one after the other with oil- and water-free compressed air. For this operation open only the 2 packers next to each other.
- Inject **weber.tec 945** into the packers with a suitable mechanical or manual injection pump. In case of vertical cracks start injection works with the lowest packer. Valves of all other packers above the one used must be open to prevent air accumulation.
- In case of horizontal cracks carry out the injection from one side. Continue the injection until the resin leaks out from the adjacent packer. This is necessary to obtain a uniform material distribution. Inject the resin into the head of the adjacent packer after screwing in the check valve, and so forth. After about 15 - 30 minutes the material is injected again.

- After completion of injection works clean tools and conveying parts with the thinner **weber.sys 992**.
- Knock off the packers after complete reaction of resin.
- Close the drill holes with suitable non-shrinking mortar.

## Application by pouring method

- Drill holes in horizontal surfaces down to the bottom of the crack in a distance of 50 cm.
- Close possible outlet openings with the extremely quick-setting cement **weber.rep 760**.
- Pour **weber.tec 945** in the boreholes and re-fill as soon as the resin level sinks.
- Scatter oven-dried silica sand onto the fresh resin up to saturation.

---

## Practical information

Colours:  
transparent, yellowish

Tools:  
Electric drill + stirrer **weber.sys Rührpaddel no. 2** or **no. 8**, mechanical injection pump, manual injection pump, adhesive, drive-in or screw packers; for preparation works: steel brush or diamond disc.

Storage:  
The product can be stored at least 12 months in its original unopened packaging, if kept dry.

---

## Consumption / yield

---

per dm<sup>3</sup> filling space: approx. 1.1 kg

---

---

## Packagings

Type	Sales unit	Number / euro-pallet
Metal bucket (kit with comp. A + comp. B)	1 kg	9 buckets / cardboard
Metal bucket (kit with comp. A + comp. B)	5 kg	56 buckets

*The information in this technical data sheet is based on our current knowledge and experience at the time of printing. However, they do not guarantee in the legal sense.*