

# WILLPOX ® 7147

# 2-component crack injection resin based on epoxy resin

# 1. Applications

**WILLPOX® 7147** is a solvent-free and low-viscosity 2-component epoxy-based reaction resin specially developed for the friction-filling of cracks, voids and defects in dry or matt damp concrete or masonry structures.

**WILLPOX® 7147** has very low viscosity and therefore penetrates well, even into finer cracks, and develops high compressive and flexural strengths. **WILLPOX® 7147** permissibly ensures a permanently force-fit bonding of the crack flanks even on matt damp substrates.

**WILLPOX® 7147** is used in construction and underground work for the force-fit injection of cracks in tunnels, reinforced concrete elements, dams and other structures made of concrete and masonry.

# 2. Substance data\*

|                          |              | WILLPOX <sup>®</sup><br>7147 -A | WILLPOX <sup>®</sup><br>7147 -B | Norm            |
|--------------------------|--------------|---------------------------------|---------------------------------|-----------------|
| Mixing ratio             | Weight parts | 2.26 1                          |                                 |                 |
|                          | Volume parts | 2                               | 1                               |                 |
| Density at 23°C          | kg/m³        | 1.120 ± 50                      | 1.000 ± 50                      | DIN 51757       |
| Viscosity at 23°C        | mPa*s        | 500 ± 50                        | 15 ± 05                         | DIN EN ISO 3219 |
| Mixing viscosity at 25°C | mPa*s        | 165 ± 15                        |                                 | DIN EN ISO 3219 |
| Colour                   |              | yellowish                       |                                 |                 |
| Processing temperature   | °C           | 10 - 30                         |                                 |                 |

### 3. Reaction and mechanical data\*

| Reaction profile at:                                 |     | 10°C  | 20°C | 30°C      | Norm    |
|--|-----|-------|------|-----------|---------|
| Processing time (pot life)                           | min | 145   | 100  | 50        | PV_FW10 |
|  |     |       |      | Norm      |         |
| Flexural strength after 7 days                       |     | N/mm² | 39   | ISO 527   |         |
| Compressive strength at 10% compression after 7 days |     | N/mm² | 109  | ISO 604   |         |
| Flexural modulus of elasticity after 7 days          |     | МРа   | 887  | ISO 527   |         |
| Shore D after 7 days                                 |     |       | 76   | DIN EN IS | O 868   |

# 4. Composition and properties

**WILLPOX® 7147** is permanently resistant to water, seawater and wastewater in the cured state, as well as to numerous alkalis, dilute acids, salt solutions, mineral oils, lubricants and fuels, as well as to short-term exposure to various solvents.

### 5. Preparation/Processing

#### Mixture:

Both components are supplied in the correct mixing ratio.

Pour component B into the resin component (A) and make sure that it runs out completely. Then mix (A+B) with a mechanical agitator at a maximum of 300 rpm.

Mix thoroughly, e.g. using a slow-running drill with a stirring paddle. It is essential to also stir thoroughly from the bottom and sides so that the components are mixed homogeneously with each other (without streaks)! The optimum mixing time is about 3 minutes, and the material temperature should be approx. +15°C during the mixing process.

Do not process the mixed material from the delivery container but transfer it to a clean container and then pour it into the processing equipment (e.g. pump hopper).

Recommended application equipment: air-operated 1-component piston pumps, electrically operated 1 K diaphragm pumps, hand lever pumps.

### Cleaning:

After each work step, the equipment and tools must be carefully cleaned with thinner.



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# 6. Safety instructions

**WILLPOX® 7147 -A** and **WILLPOX® 7147 -B** are classified as dangerous according to REGULATION (EC) No 1272/2008. Before starting processing, it is necessary to inform yourself about precautionary measures and safety advice by means of the safety data sheets.

#### Other notes:

Observe BG regulation 227 "Activities involving epoxy resins", BG leaflet M 004 "Irritant substances - Corrosive substances".

GISCODE: RE1 (Epoxy resins, solvent-free, sensitising)

# 7. Storage

At least six months after delivery or twelve months after production if stored dry between 10°C and 30°C. The minimum durability is reflected by the batch number on the container.

# 8. Delivery form

|                            | WILLPOX <sup>®</sup> 7147 -A  | WILLPOX <sup>®</sup> 7147 -B    |  |
|----------------------------|-------------------------------|---------------------------------|--|
| 2 kg combi container       | 3 l tin can à 1.388 kg        | 0,9 l lid insert à 0.612 kg     |  |
| (item no. WPOX-7147-1-2,0) | (item no. WPOX-7147-1-A1,388) | (item no. WPOX-7147-1-B0,612)   |  |
| 20 kg                      | 30 l hobbock à 13.88 kg       | 10 l plastic canister à 6.12 kg |  |
| (item no. WPOX-7147-1-20)  | (item no. WPOX-7147-1-A13,88) | (item no. WPOX-7147-1-B6,12)    |  |

Other delivery forms on request.



### 9. Waste management

In Germany, empty packaging can be taken back by the KBS or Interseroh-System for steel or plastic packaging. The return is limited exclusively to used, completely empty packaging of the same type, shape, and size that we carry in our product range.

Transport and outer packaging are not included.

For more information on the location and further modalities of the return, please visit the website of the recycling partner acting on our behalf:





Interseroh+ GmbH

www.interseroh.plus info@interseroh.plus Tel.: +49 (0)2203 9147 - 1268 Kreislaufsystem Blechverpackungen Stahl GmbH www.kbs-recycling.de info@kbs-recycling.de Tel.: +49 (0)211 239228 - 0

Reacted product residues can be disposed of in smaller quantities with household waste, in larger quantities as construction waste or incinerated. Non-reacted product components must be disposed of in accordance with local regulations.

# 10. Test certificates/Approvals

In accordance with EN 1504-5 "Concrete crack fillers, injection of concrete components for the non-positive filling of cracks, voids and defects", System 4, **WILLPOX® 7147** is CE-marked.



### 11. Legal notices

#### \*The indicated data are laboratory values.

Our technical application advice, which we give to support the customer or applicator on the base of our experience and to the best of our knowledge according to the current state of knowledge in practice and science, is non-binding and does not represent an agreed quality. The data and processing instructions are based on laboratory tests.

In practice, the measured values may be different due to influences outside our control. We explicitly reserve the right to make technical changes during further development.

The technical documents should be read carefully before starting work.

With the publication of a new version of the technical data sheet, all previous data sheets lose their validity. The applicator must test the products for their suitability for the intended application.

With the publication of this data sheet, previous editions become void.

#### F. Willich GmbH + Co. KG

Planetenfeldstr. 120 44379 Dortmund Germany

Phone: +49 (0) 231 9640 - 0 Fax: +49 (0) 231 9640 - 232 info@f-willich.com www.f-willich.com



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