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# 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> 7147 -A	WILLPOX® 7147 -B	Standard
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	Standard
Processing time (pot life)	min	145	100	50	PV_FW10

			Standard
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 ISO 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.



### 6. Safety instructions

**WILLPOX® 7147 -A** and **WILLPOX® 7147 -B** are classified as dangerous according to REGULATION (EC) No 1272/2008. Before starting application, it is therefore 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 batch number on the container provides information about the minimum shelf life. When using products that have been stored for a longer period, it is generally recommended that F. Willich GmbH + Co. KG checks whether the product specification is still given before using this product.

### 8. Delivery form

	WILLPOX® 7147 - A	WILLPOX® 7147 - B
2 kg combi container (Art.No. WPOX-7147-2,0)	3 l tin can à 1.388 kg	0.9 l lid insert à 0.612 kg
20 kg (Art.No. WPOX-7147-20)	10 l tin bucket à 13,88 kg	10 l plastic canister à 6,12 kg

Other delivery forms on request.



# 9. Waste managenent

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:



KBS 0234

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 data given are laboratory values.

Our technical application recommendations, which we give to support the buyer or processor on the basis of our experience to the best of our knowledge in accordance with the current state of knowledge in practice and science, are non-binding and do not constitute an agreed quality.

The data and processing instructions given are based on laboratory tests.

In practice, the measured values may deviate due to influences outside our sphere of influence.

We expressly reserve the right to make technical changes in the course of further development.

The technical documentation must therefore 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 user must check the products for their suitability for the intended application.

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

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