

## **FIX-O-FLEX**

### **Properties:**

*FIX-O-FLEX* is a one-component, pasty adhesive- and sealing compound based on silane-modified polymer, which hardens through humidity to a flexible product.

*FIX-O-FLEX* can be used as sealing compound in extremely strained joints, such as industrial plants, roads.

Due to its high chemical resistance *FIX-O-FLEX* is suitable for chemically loaded areas (see chemical resistance chart).

*FIX-O-FLEX* is even in fresh condition very adhesive, so that already after joining the adhesive parts together a high holding power is reached.

Due to the reaction with moisture, the product is particularly suitable for bonding *HYDROTITE* and *HYDROSEAL* water-expanding rubber profiles even on wet surfaces.

*FIX-O-FLEX* can also be used for working underwater.

### **Applications:**

- bonding and sealing without primer on polyester (GRP), PVC, acrylic-glass, polystyrene, Makrolon, EPDM (like *PROOFMATE E*, *EK* and *FD*-membrane) steel, stainless steel, aluminium, concrete, clinker, marble, glass and wood
- sealant for extremely high strained joined, in which only small movements will be expected (max. 10% movement absorption)
- sealing and bonding even underwater and on wet surfaces

### **Technical data:**

#### **Substance data:**

Consistency	pasty	
Colour	white, black, grey	
Odour	odourless	
Spec. density (23°C)	approx. 1.5 g/cm <sup>3</sup>	DIN EN ISO 2811-1
Dyn. viscosity (23°C)	approx. 4000 Pas	DIN EN ISO 2555

#### **Reaction data (23°C):**

Processing temperature	5 - 40°C	substrate temperature
Tack-free time *	approx. 15 min	ASTM C679
Setting process *	approx. 3 mm/24 h	

#### **Properties of cured mastic:**

Tensile strength	approx. 2.5 N/mm <sup>2</sup>	DIN EN ISO 527
Elongation at break	approx. 500 %	DIN EN ISO 527
Shore A hardness	approx. 55	DIN ISO 7619-1
Max. movement absorption	approx. 10 %	
Temperature resistance	-40 to +90°C	

( \* measured at 23°C / 50 % rel. humidity)

### Chemical resistance

#### Classification:

- + resistant (non or little effect)
- +/- limited resistant (moderate effect)
- not resistant (serious effect)

DIN EN ISO 175

Chemical compound	Classification	Remarks
Isopropanol	+	
Ethyl acetate	+	
Salt solution 12 %	+	
Salt solution 25 %	+	
Sulfuric acid 96 %	-	
Sulfuric acid 10 %	+	
Petrol	+	
Diesel fuel	+	
Kerosine, Jet fuel (Jet A1)	+	
Mineral oil 15W40	+	
Brake fluid (ESSO DOT 4)	+	
o-Xylene	+/-	after back drying significant changes
m-Xylene	+/-	after back drying significant changes
Toluene	+/-	after back drying significant changes
Ethylene glycol	+	
Methyl ethyl ketone	+	
Phosphoric acid 10 %	+	
Nitric acid 10 %	+/-	after back drying slight changes
Oxalic acid 10 %	+/-	after back drying slight changes
Citric acid 10 %	+/-	after back drying slight changes
Lactic acid 10 %	+/-	after back drying significant changes
Acetic acid 10 %	+/-	after back drying slight changes
Sodium hydroxide solution 10 %	+	
Calcium hydroxide solution 20 %	+	
Ammoniac solution 10 %	+	
Hydrogen peroxide solution 10 %	+	
Isoparaffin, high-boiling	+	

#### Processing:

The surfaces shall be firm, sustainable, clean, dry and free of separating substances (fats, oils, etc.).

In case of extremely absorbent surfaces the use of *FIX-O-FLEX PRIMER* is recommended.

*FIX-O-FLEX* should be sprayed steady with force on the bonding area. For the processing we propose the manual caulking gun Z1 Plus or pneumatic caulking guns out of our program.

Opened containers should be used up as soon as possible.

The adhesion on hard-to-bond plastics such as PE or PP (polyolefine) should be tested before beginning.

On contact surfaces such as aluminium, galvanised steel plate, PVC, PS, Makrolon and others *FIX-O-FLEX* can be used without primer.

The adhesion on slightly moist concrete surfaces is similar high as on dry primed concrete. In addition bonding under water is possible.

The full hardening time depends on the humidity and temperature. By increasing the temperature and humidity the full hardening time can be reduced.

**Safety information:**

*FIX-O-FLEX* is not classified as hazardous according to Regulation (EC) 1272/2008 (CLP).

Even in the case of not classified products, the standard precautionary measures applicable for chemical products should be observed.

It is therefore necessary, before beginning processing, to become familiar with the precautions and safety advice as indicated in the material safety data sheet.

**Packaging:**

290 ml cartridges  
600 ml aluminium foil sausages

Bigger packaging on request.

**Storage:**

Shelf life at least 9 month in original packaging when stored in dry conditions between 15-25°C, protected from heat, frost and direct sunlight.

After the expiration the use of the product is generally not recommended, unless an approval has been provided by TPH. This approval can only be obtained by the quality assurance department of TPH releasing the material after verification of main properties being within specification.

**Disposal:**

Small quantities of cured product residues can be disposed of as normal domestic waste. Dispose of not cured product components must be effected in accordance with the corresponding local regulations. For further information please refer to the material safety data sheets.

**Test certificates:**

Measurement of bond strength of *FIX-O-FLEX* on concrete and steel; MFPA Leipzig 2001

Resistance of *FIX-O-FLEX* standard, *FIX-O-FLEX H* and *FIX-O-FLEX VG* to highly concrete-attacking fluids and sulfuric acid pH 1; MFPA Leipzig 2003

Determination of watertightness of ACO drainage channel in combination with *FIX-O-FLEX* according to DIN EN 1433; MFPA Leipzig 2004

Testing of mastic asphalt on *FIX-O-FLEX*; TPA GmbH 2008

DIN EN 1542 bond strength by pull-off after different storage; MFPA Leipzig 2012



*FIX-O-FLEX* and *PROOFMATE EK* - Detection of the fire behaviour according to DIN 4102-1; Prüfinstitut Hoch Fladungen 2012

Examination according to TrinkwV 2012 and Coatings Guideline; görtsler analytical services gmbH Vaterstetten 2019

**Legal notice:**

The correct and thus successful application of our products is not subject to our control. A guarantee can be issued for the quality of our products within the framework of our sales and supply conditions, however not for successful processing. All data and specifications in this specification sheet are based on the present state of the art and the right to changes and adaptations for the sake of development remains explicitly reserved. The consumption specifications designated by us can be only average empirical values, where deviations are possible on an individual basis and therefore cannot be excluded by us.

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*Waterproofing Systems*