

Technical Data Sheet Issue: 06-10-2015

FIX-O-FLEX H

CE marking in accordance with EN 15651-1



Properties:

FIX-O-FLEX H is a single-component, pasty sealing compound on the basis of silane-modified polymers which hardens to an elastic product when subjected to humidity.

FIX-O-FLEX H is a multi-purpose compound e.g. for facades, connection and expansion joints for interior and exterior application in building and civil engineering, structural engineering and tunneling, for sealing of wood and metal structures as well as for drainage channels.

FIX-O-FLEX H is highly UV resistant and can be over-coated.

Technical data:

Substance data:

Consistency pasty
Colour grey, white
Odour odourless
Spec. density (23°C) approx. 1.5 g/cm³

Spec. density (23°C) approx. 1.5 g/cm³ DIN EN ISO 2811-1 Dyn. viscosity (23°C) approx. 100 Pas DIN EN ISO 2555

Reaction data (23°C):

Processing temperature 5 - 40°C substrate temperature

Tack-free time * approx. 2-3 h ASTM C679

Setting process * approx. 2 mm/24 h

Properties of cured mastic:

Tensile strength approx. 0.5 N/mm² DIN EN ISO 527 Elongation at break approx. 600 % DIN EN ISO 527 Shore A hardness approx. 25 DIN ISO 7619-1

Max. movement absorption approx. 25 % Temperature resistance -40 to +80°C

^{(*} measured at 23°C / 50 % rel. humidity)



Chemical resistance Classification:

DIN EN ISO 175

resistant (non or little effect)
 limited resistant (moderate effect)
 not resistant (serious effect)

Chemical compound	Classification	Remarks
Isopropanol	+/-	after back drying significant
		changes
Ethyl acetate	+/-	after back drying significant
		changes
Sulfuric acid 96 %	-	
Sulfuric acid 10 %	+/-	after back drying slight
D. ()	,	changes
Petrol	+/-	after back drying slight
Diesel fuel	+/-	changes after back drying slight
Diesei luei	+/-	changes
Kerosine, Jet fuel (Jet A1)	+/-	after back drying slight
real course, detruct (det / tr)	.,	changes
Mineral oil 15W40	+	Grange -
Brake fluid (ESSO DOT 4)	+	
o-Xylene	-	
m-Xylene	-	
Toluene	-	
Ethylene glycol	+/-	after back drying slight
		changes
Methyl ethyl ketone	+/-	after back drying significant
BI 1 : :140.00	,	changes
Phosphoric acid 10 %	+/-	after back drying slight
Nitria i-l 40.07		changes
Nitric acid 10 % Oxalic acid 10 %	+/-	
Oxalic acid 10 %	+/-	after back drying slight changes
Citric acid 10 %	+/-	after back drying slight
Citile dela 10 70	17	changes
Lactic acid 10 %	+/-	after back drying significant
	.,	changes
Acetic acid 10 %	+/-	after back drying significant
		changes
Sodium hydroxide solution 10 %	+/-	after back drying slight
		changes
Calcium hydroxide solution20 %	+	
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.). The surfaces shall not contain substances containing tar, as otherwise the adhesion is reduced.

FIX-O-FLEX H should be sprayed steady with force on the bonding area. For the processing of aluminium foil sausages we propose the manual caulking gun Z2 or an equivalent unit.

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. A preliminary compatibility test is necessary for the application on coated surfaces.



The application of a primer, e.g. *FIX-O-FLEX PRIMER*, is prescribed for jointing in compliance with DIN 18540-F on concrete, porous concrete, cement, gypsum etc. Two applications of primer might be necessary in the case of highly absorbent surfaces.

However, FIX-O-FLEX PRIMER can only be applied on dry surfaces. We recommend to use HYDROPOX EPG as primer for wet surfaces.

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

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 H 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:

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:

Testing of the joint sealant *FIX-O-FLEX H* according to DIN 18540 - Sealing of exterior wall joints in building using joint sealants; Polymer Institut Flörsheim-Wicker 2000

Testing of a joint sealant in compliance with the German Foodstuffs and Commodities Act (LMBG); Institut Fresenius Taunusstein 2000

Measurement of bond strength of *FIX-O-FLEX H* on polymer modified bituminous thick coating; MFPA Leipzig 2003

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 BIRCO drainage channel in combination with *FIX-O-FLEX H* according to DIN EN 1433; MFPA Leipzig 2004

Resistance test of *FIX-O-FLEX H* to swimming pool water for a period of 6 month; MFPA Leipzig 2006

Resistance test of *FIX-O-FLEX H* to swimming pool water for a period of 12 month; MFPA Leipzig 2006

Determination of parameters of water vapour diffusion of *FIX-O-FLEX H* coating material according to DIN 52615 for a humidity range of 23°C and 50/95 % rel. humidity; University of Rostock 2007

Initial type testing of *FIX-O-FLEX H* according to EN 15651-1; Kiwa Polymer Institut GmbH Flörsheim-Wicker 2014



TPH Bausysteme GmbH Nordportbogen 8 D-22848 Norderstedt

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GER0513/17

EN 15651-1:2012

Sealant for facade for interior and exterior application (suitable for use in cold climate areas)

F EXT-INT CC

Pretreatment: procedure B Substrate: concrete with primer

Reaction to fire	class E	
Release of chemical dangerous to the environment and health	NPD	
Water tightness and air tightness		
Resistance to flow	≤ 3 mm	
Loss of volume	≤ 10 %	
Tensile properties (i.e. elongation) at maintained extension after water immersion	passed	
Tensile properties (i.e. secant modulus) for non- structural low modulus sealants used in joints in cold climate areas (-30°C)	≤ 0,9 MPa	
Tensile properties (i.e. at maintained extension) for non-structural sealants used in joints in cold climate areas (-30°C)	passed	
Durability	passed	



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.

TPH Bausysteme GmbHNordportbogen 8 **D-22848 Norderstedt**

Tel.: +49 (0)40 / 52 90 66 78-0 Fax: +49 (0)40 / 52 90 66 78-78 e-mail info@tph-bausysteme.com Web www.tph-bausysteme.com

