



## E501f.pl

### Product Data Sheet



Firewin

2018-12

# Knauf Fire Protection Polymer - FPP

## Product description

Knauf Fire Protection Polymer - FPP is a fire and sound rated sealant designed for a number of special applications including high movement and sanitary seals, where normal fire rated acrylics cannot be used. The sealant produces an efficient seal against fire, smoke, gas and sound.

### Storage

Store dry in the original packaging.

Storage temperature: between 5°C and 35°C

Storage stability: 24 months stored in unopened cartridges, see imprint on cartridge for expiry date

### Method of delivery

Knauf Fire Protection Polymer - FPP 310 ml cartridge, article no. 651095

## Scope of application

Knauf Fire Protection Polymer - FPP is a high performance, professional quality, one part ready to use sealant and adhesive. It is suitable for a wide variety of building trade applications including decorating, flooring, joinery, plumbing and tiling and out-performs conventional silicone, MSP, butyl and acrylic based products as a sealant and adhesive.

Knauf Fire Protection Polymer - FPP maintains integrity of a joint in a fire situation giving a minimum 4 hours as long as the surrounding construction remains intact.

FPP eliminates the selection choices that need to be made with conventional sealants and adhesives, offering one solution for all internal building applications.

## Properties

- Excellent adhesion to most common substrates
- Easy to apply and tool off
- 3D joint movement capability minimum 25%
- Fire rated up to 4 hours both integrity and insulation
- Low shrinkage
- 24 months storage time
- Only technology available that is VOC free
- Certified according to ETA 18/0931
- EAD 350141-00-1106

## Fire Classification

Knauf Fire Protection Polymer - FPP maintains integrity of a joint in a fire situation giving a minimum 4 hours as long as the surrounding construction remains intact. Both the sealant and the backing material must be applied to a minimum depth to achieve the stated fire resistance. The type of backing material must be as specified.

Joint with width $\leq$ 30 mm	Backing material	Fire Resistance
<b>Concrete, masonry and gypsum walls 100mm thick</b>		
Double sided seal $\geq$ 12.5mm depth	Stonewool $\geq$ 1255 mm depth	EI 120
<b>Concrete floors 150mm thick</b>		
Double sided seal $\geq$ 15mm depth	Stonewool $\geq$ 20mm depth	EI 240
Single sided seal $\geq$ 25mm depth (on top)	Knauf Backing $\geq$ 48mm depth	EI 180

## Emission data (indoor air quality):

Compound	Emission rate after 3 days	Emission rate after 4 weeks
TVOC	7,7 $\mu\text{g}/\text{m}^3$	< 5 $\mu\text{g}/\text{m}^3$
TSVOC	n.d.	n.d. (< 5 $\mu\text{g}/\text{m}^3$ )
VOC w/o NIK	n.d.	n.d. (< $\mu\text{g}/\text{m}^3$ )
R Value	< 1	< 1
Formaldehyde	< 3 $\mu\text{g}/\text{m}^3$	< 3 $\mu\text{g}/\text{m}^3$
Acetaldehyde	< 3 $\mu\text{g}/\text{m}^3$	< 3 $\mu\text{g}/\text{m}^3$
Sum for+ace	< 0,002 ppm	-
Carcinogenic	n.d. (< 1 $\mu\text{g}/\text{m}^3$ )	n.d. (< 1 $\mu\text{g}/\text{m}^3$ )
n.d. = not detected		

## Sound insulation:

Description	Sound reduction
Single sided seal $\geq$ 12mm depth	62 dB
Double sided seal $\geq$ 12mm depth	> 62 dB

FPP has been tested at BM Trada (UKAS accredited); according to EN ISO 10140-2:2010. Usage of any backing material is optional, due to the tests being conducted with sealant only.

## Safety:

Please observe the EC Safety Data Sheet.

## Note

FPP complies with the requirements of GEV and the results correspond to the EMICODE emission class EC1<sup>PLUS</sup> which is the best possible environmental and indoor hygiene health protection mark.

FPP is the only technology available with no dangerous emissions during usage and curing. Tested by Eurofins Product Testing, report number G17798A.

Technical Data	
Form:	Ready to use thixotropic paste
Specific gravity:	1,54 g/cm <sup>3</sup>
VOC:	0 g/l
Durability w/ageing:	Type X (UV / water) (pass)
Chemical resist.	Test passed (resistant)
Salt water immersion:	Test passed (resistant)
Microbiologic growth:	0 (no growth)
Hardness:	Shore A 47
Shrinkage:	15% volume single sided
Tensile properties:	3,79 MPa (379 N/mm <sup>2</sup> )
Tensile elongation:	270%
3D-tensile prop.:	0,24 MPa (24 N/cm <sup>2</sup> )
3D-tensile elong.:	106%
Tear properties:	50%
Compression resist:	434 N / 1569 MPa
Radon resistance:	1.5mm thickness FPP gives Z = 2.9 108 s/m
Flashpoint:	None
Reaction to fire:	Classification D-s2, d0
Fire resistance	Up to class EI 240
Tack free time:	60 minutes maximum
Skin time:	30 minutes maximum
Rate of cure:	10% at 24 hours
Solids content:	> 80%
Resistance to flow:	< 0.5 mm
Frost:	Uncured sealant should not be frozen
Thermal Conductivity:	0,845 W/mK (+/- 3%) at 20mm depth (to EN 12667).
Compatibility:	Can be used in contact with most building and decorating materials.
Service Temp:	40°C to +75°C

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