

## FPG Graphite

Heat-swelling fire protection mastic

Technical Data Sheet

01/2024

### Material

Ready-to-use, fireproof, one-component, semi-flexible, specially formulated graphite mass, specially developed for fire protection seals. At elevated temperatures (+150 °C), the mass swells, providing effective sealing against fire, smoke and gases – up to 4 hours.

#### Storage

12 months. Store in a dry place on wooden pallets in unopened original packaging. Storage temperature from +5 °C to +30 °C.

#### Quality assurance

According to the requirements of norm EAD 350454-00-1104, Knauf FPG Graphite has undergone a European Technical Assessment ETA 23/0970; constant control of the production process is ensured. The product is marked with the CE mark.

### Application

FPG Graphite fire protection mastic is designed for sealing all types of structures and utility crossings to prevent the spread of fire, smoke and gases through fireproof walls and coverings. Under fire conditions, the sealant swells and covers holes around combustible utility crossings. Thermal expansion takes place at a temperature of +150 °C, and then the material swells, preventing the spread of fire and smoke for a maximum of 4 hours.

It is classified for all types of structures – lightweight partitions, solid walls and coverings, solid wood CLT wall and covering panels. The mastic is especially suitable for the fireproof sealing of complex utility crossings: for combustible PVC pipes up to Ø 160 mm (which is not possible with traditional fire protection sealing sealants), as well as PE, ABS, PP, PEX pipe-in-pipe, individual cables, cable bundles, cable protection tubes, non-combustible pipes and multi-layer pipes with combustible insulation. For indoor work.



### Features and benefits

- Ready to use
- Air, smoke and gas tight, tested at 600 Pa
- High sound insulation
- Low emissions – environmentally and user friendly
- Classified for all types of structures and utility crossings
- Smooth surface finish
- Easy to apply
- Service life 25 years
- For indoor work

#### Note

FPG Graphite mastic is designed for all types of derived combustible pipes:

- PVC pipes, including PVC-U, PVC-C and others, if they comply with EN 1329-1, EN 1452-2, EN 1453-1 or EN 1566-1,
- PP pipes, including PP-MV, PP-H, PP-R and others, if they comply with EN 1451-1 or DIN 8077/8078,
- PE pipes, including PE-LD, PE-MD, PE-HD, PE-X and others, if they comply with EN 1519-1, EN 12201-2 or EN 12666-1, ABS according to EN 1455-1 and for pipes made of SAN+PVC according to EN 1565-1.

## Processing

Openings or joints in walls and coverings must be dry, clean, and free of dust.

Processing is to be carried out in accordance with ETA 23/0970 as well as the installation instructions Knauf FPG Graphite E501g.lv-A1.

### Temperature/climate

The air and base temperatures during processing and curing must be between +5 °C and +30 °C.

## Other instructions

In case of contact with the eyes, rinse them with plenty of water and seek medical help.

This technical sheet defines the scope of use of the material and the recommended work to be carried out, but it cannot replace the skill of the contractor. In addition to these recommendations, the work must be carried out in accordance with the requirements of the construction work. The manufacturer guarantees the quality of the product but has no influence over how and under what conditions it is used. If in doubt, a trial application should be carried out. This technical data sheet supersedes previous editions of technical sheets.

### Occupational safety and waste collection

Waste identification class: 080410 (see material safety data sheet).

## Technical data

Designation	Unit/Norm	Value / Size
Reaction to fire class	LVS EN 13501-1	B-s1, d0
Fire resistance	LVS EN 13501-2	ETA 23/0970
Density	kg/m <sup>3</sup>	1.55
Air permeability	EN 1026:2016	air, smoke and gas tight
Flexibility	EN: ISO11600	12.5%
Operating time	years	≥ 25
Resistance	EAD 350454-00-1104, Clause 2.2.9	Z2
Airborne sound insulation (at 25 mm thickness)	EN 10140-1,2,4,5/ EN ISO 717-1	Rw(C;Ctr)= 53 (0;-1) dB
Thermal conductivity (in 20 mm thickness)	W/m·K	0.85
Temperature resistance	°C	-15 to +75
Application temperature	°C	+5 to +30
Non-adhesive	min	60
Film formation	min	30
Hardening	days	3-5 (depending on thickness and ambient temperature. Full hardening takes up to 30 days)
Colour	-	dark grey

## Sustainability and environment

Criterion	Class	Value
French VOC Regulation	A+	fulfils
AgBB/ABG	-	fulfils
EMICODE	EC1 PLUS	fulfils
Blue Angel (DE-UZ 123)	-	fulfils
BREEAM-International	exemplary level	fulfils
LEED-EU (v4.1) BETA	-	fulfils

## Delivery programme

Title	Packaging	Packaging box / pallet	Art. Nr.	EAN code
Knauf FPG Graphite	300 ml	12 pcs per box / 1092 pcs per pallet	00816958	4750614007815

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