

## TECHNICAL DATA SHEET

# PENOSIL FireStop Intumescent 680

One-component intumescent elastomeric putty based on acrylic resins. In contact with fire, it forms an inorganic crust which is unaffected by fire and expands in heat, providing an insulation fire barrier and stopping the passage of smoke and flames through the sealed joint.

### Main benefits

- Withstands fire for 3 hours in lineal joints and 4 hours in piping
- Prevents the passage of fire and hot gases
- Halogen, solvent and asbestos free
- Water base. No odour
- Highly flexible and water resistant
- Paintable after curing
- Adhesion to most common building substrates
- Durable
- Permanently flexible

### Fields of application

- Interior joint seals where a low movement and passive fire protection is required.
- Joints in slabs, walls, fire walls, partition walls, door and window frames, etc.
- Sealing of gaps around pipes, cables, ducts, services and small openings which penetrate firewalls and floors.
- Filling gaps in concrete and plaster, to protect from fire and smoke.

### Adhering

- Metals
- Concrete
- Bricks
- Tiles
- Ceramics
- Glass
- Wood
- PVC

### Application instructions

#### Application conditions

Application temperature between +5°C and +40°C.

#### Surface preparation

Substrates (joint flanks) must be clean, dry, and free of dust, grease and other contaminant which may affect the adhesion. Non-porous surfaces (such as aluminium, glass, etc.) should be cleaned with a suitable solvent and thoroughly dried with a clean cloth. Porous substrates (such as concrete, brickwork, etc.) must be mechanically cleaned from loose particles. Mask off the joint edges.

#### Application method

Cartridge: cut off the threaded end of the cartridge and screw on the application nozzle for directing sealant. Cut the threaded end in a way where a suitable opening for application is produced. Place the cartridge

together with the applicator in the gun and fill the installation nozzle with sealant, by repeatedly pressing the gun trigger.

Apply sealant in the joint by repeatedly and evenly pressing on gun trigger and smoothly dragging the nozzle along the joint. After application, smooth the surface with a suitable tool (e.g., spatula) and remove excess material.

If necessary, the adjacent surfaces of the joint should be protected to avoid staining. Usually, masking tape is being used for this. Protective masking tapes should be removed before the sealant's skin is formed.

In wider and movable joints, backer rod should be used as a back-up material, to ensure the correct thickness and shape of sealant joint and to avoid three-sided adhesion.

Ensure adequate ventilation in all joint locations. During the curing process, make sure that no impurities can settle on the surface and that the joint surface is not affected by mechanical load.

### Cleaning

Uncured product may be easily removed with warm water or with Penosil Cleaning Wipes.

Cured sealant must be removed mechanically.

### Technical data

Properties	Value	Unit
Basis	Acrylic	
Consistency	Non-slump paste	
Density (DIN 53 479-B)	1,56	g/ml
Skin forming time	20...30	minutes
Curing rate	2...3	mm/24h
Loss of volume (ISO10563)	<25	%
Resistance to flow (ISO 7390)	<3	mm
Application temperature	+5...+40	°C
Service temperature	-20...+80	°C
Movement capability (ISO 11600)	7,5	%
Shore A hardness (ISO 868)	20	
E-Modulus 100% (ISO 37)	0,15	N/mm <sup>2</sup>
Tensile strength (ISO 37)	0,20	N/mm <sup>2</sup>
Elongation at break (ISO 37)	300	%

The values specified were obtained at +23 °C and 50% relative humidity, unless otherwise specified. These values may vary depending on environmental factors such as temperature, moisture and type of substrates.

### Technical classification and certificates

- Sealant for façade for interior application.  
EN 15651-1:2012: Type F-INT
- French VOC-emission class A+
- Fire resistance according to EN:13501-2.
- Tested according to EN:1366-4
- Tested according to EN:1366-3
- Tested according to EN:1363-1

### Colour

White.

### Package

300 ml cartridge, 24 pcs in a box.

## Storage conditions and shelf life

Guaranteed shelf life 12 months from the manufacturing date when stored in closed original package in a dry place and protected from direct sunlight at temperatures between +5 °C and +30 °C.

## Limitations

- Do not use on bituminous substrates or on building materials which might bleed oils, plasticizers or solvents (e.g. rubber, chloroprene, EPDM, ...).
- Do not use for continuous immersion in water.
- It should not be applied when exposure to rain is likely within 24 hours of application.
- Not recommended for food direct contact applications.
- There is no adhesion to PE, PP, PTFE (Teflon®). In cases of unknown materials, adhesions tests are recommended.
- It can be overpainted. Due to the large number of paints and varnishes available we strongly suggest a compatibility test before application.
- Please observe the expiration date!

## Safety regulations

Ensure sufficient ventilation during application and wear necessary personal protective equipment. More specific safety information is available on the safety data sheet (SDS).

Note: The instructions in the present documentation are based on tests carried out by the manufacturer and are presented in good faith. Due to variations in materials and substrates as well as the various application possibilities that are beyond our control, the manufacturer is not liable for the results achieved. In any case, it is recommended to test the product suitability at the place of application. Manufacturer reserves the right to modify products without prior notice. This TDS replaces and supersedes all previous data sheets on the same product.