

# PremFire B1 FR Construction Foam

## **Product Description**

One-component, ready to use polyurethane foam for installation of fire-proof doors and windows, sealing of joints in fire rated walls and other sealing works in places which have heightened requirements concerning building materials reaction to fire properties. Adheres well to most materials like wood, concrete, stone, plaster, metal, PVC and polystyrene.

#### **Features**

- Fire rated up to 240 minutes
- Fire class B1 (DIN) and B-s2,d0 (EN)
- Low expansion avoids deformation of building elements
- High mechanical strength
- No shrinkage
- High thermal and acoustic insulation value

## Typical Applications

- Installation of fire-proof doors and windows
- Sealing of joints in fire rated walls
- Sealing works in places which have heightened requirements concerning building materials reaction to fire properties.

	Value
Tack free time (EN 17333-3)	6-10 min
Cutting time (30 mm bead, EN 17333-3)	<30min
Fully cured in joint, 3x5cm (+23 °C)	<8h
Curing pressure (EN 17333-2, moistened surfaces)	<3kPa
Post expansion (EN 17333-2)	<50%
Density in joint, 3x10cm (WGM106)	17-22kg/m³
Dimensional stability (EN 17333-2, moistened surfaces)	<1%
Temperature resistance of cured product	-50 to +90 ℃
Fire resistance class (EN 13501-2)	Up to EI240
Reaction to fire classification (EN 13501-1)	B-s2,d0
Fire class of cured foam (DIN 4102-1)	B1
Tensile strength / elongation (EN 17333-4, moistened surfaces)	>95 / 14kPa / %
Compression strength (EN 17333-4, moistened surfaces)	>40kPa
Shear strength (EN 17333-4, moistened surfaces)	>45kPa
Thermal conductivity (EN 12667, EN 17333-5)	0,03W/(m·K)
Sound reduction index Rst, w (EN ISO 10140)	62dB
Water vapour permeability (EN 12086)	<0,06mg/(m·h·Pa)
Colour	Pink



Fire resistance tested according to EN 1366-4 and rated according to EN 13501-2:

Fire Resistance Classification	EI 30-V-X-F-W-00 to 40	Joint depth 100mm and over
	EI 45-V-X-F-W-00 to 20	Joint depth 100mm and over
	EI 60-V-X-F-W-00 to 10	Joint depth 100mm and over
	EI 90-V-X-F-W-00 to 60	Joint depth 200mm and over
	EI 120-V-X-F-W-00 to 30	Joint depth 200mm and over
	EI 180-V-X-F-W-00 to 20	Joint depth 200mm and over
	EI 240-V-X-F-W-00 to 10	Joint depth 200mm and over

### **Application Instructions**

Application conditions:

Air temperature during use: +5°C to +30°C. Make sure the ambient temperature stays within this range until the foam has fully cured.

Can temperature during application: +10°C to +25°C, best results at +20°C.

Surface preparation:

Remove dust, loose particles and oil stains from the surfaces. Moisten dry substrate with water mist to ensure better results. Protect adjacent surfaces with paper, plastic film or other suitable material. If needed add additional shield outside for weather protection (against rain, wind, etc.).

Application method:

Shake the can vigorously at least 20 times. Remove the cap. Hold the foam can in upright position with valve up. Connect the applicator to the valve. Fill joints up to approx. 75%, as the foam expands. In case of larger joints apply foam in several layers and moisten slightly between each layer to ensure better results. Excess foam can be cut after it has fully cured.

Cleaning:

Use Foam Cleaner to clean tools and surfaces from uncured foam. Hands and clothes can also be cleaned from uncured foam with Cleaning Wipes. Remove cured foam mechanically after softening with Foam Remover.

## Storage conditions and shelf life

Guaranteed shelf life is 12 months from production date if stored in an unopened packaging in a cool and dry place at +5° C to +30°C. Do not expose to temperature over +50°C, do not keep near heat sources or in direct sunlight. Store and transport in upright position. Secure cans before transport.

#### Limitations

- PU foam lacks adhesion to Teflon, polyethylene and silicone surfaces.
- Cured foam is less sensitive to UV-light and direct sunlight than other conventional one-component polyurethane foams. It is recommended to cover the cured foam with suitable opaque sealant, filler, paint or other material to ensure lasting quality features. Do not cover before foam has fully cured.
- Please observe the expiration date!



# Safety regulations

Pressurized canister. Use only in well-ventilated areas. When using indoors, ventilate the room after application of foam. Do not smoke during application! Use protective gear when necessary. Keep out of the reach of children.

See label and safety data sheet (SDS) for more information.

#### Technical classification and certificates

M1 - low emission & odour.

EMICODE® EC1 Plus - very low emission

Please note: The above technical information is given as a guide and is based on recent test data obtained under laboratory conditions. Materials should be fully tested by the end user to establish suitability of the product for the intended application. May 2024