

Fire resistant PU-foam

GB / 3.3 / Rev. 5

FIREFOAM 1C



odice
PASSIVE FIRE PROTECTION



Product description

FIREFOAM 1C is a one part polyurethane foam, CFC-free, with a fire rating up to 360 minutes (according to test conditions).

It has excellent adhesion to most porous and non porous surfaces. It provides a seal against gas, flames and water.

FIREFOAM 1C is available in 2 versions:

- Sprayable version (1CP).
- Non-sprayable version (1CS).



Example of application : fire resistant installation of window and door frames

Features

- Fire resistant up to 360 minutes (see table opposite) without joint backer.
- Does not contain CFC's and H-CFC's.
- High thermal and acoustical insulation.
- Very good filling characteristics.
- Very good dimensional stability (no shrink or postexpansion).
- Excellent adhesion on all substrates (except PE and PP).
- Can be painted after full cure.

Technical data

Specific properties of FIREFOAM 1C :	
Base	polyurethane
Consistency	stable foam
Curing system	moisture cure
Cure speed	2,5 hours for a 30mm bead (at 20°C/65% RH)
Skin formation	ca. 10 min. at 10°C/65% RH
Drying	tackfree after 20-25 minutes
Density	ca. 32 kg/m ³
Shrink	none
Cellular structure	> 70% closed cells
Temperature resistance	- 40°C to + 90°C (after full cure)
Expansion	1 liter of foam gives 25 to 30 liters under free expansion
Thermal conductivity	0,035 W/m.K
Compression strength	7,6 N/cm ²
Vapour permeability	70 g/m ² / 24 hours

Certificate ETA (European Technical Approval) - 13/0465 is available.

Fire rating

FIREFOAM 1C has been tested by the following certification agencies:

Warrington Fire Gent (Belgium) Test report 9810C, according to new EN 1366-4 following NBN 713.020.

CSTB (France) Test report RS00-153 in accordance with the "Arrêté du 3/08/1999".

a) Warrington Fire Research Centre

Wall thickness (test with cellular concrete blocks)	Joint dimension	Joint backer	Fire resistance
200 mm	Width: 11 mm Depth: 200 mm	None	229 min (EI 180)
200 mm	Width: 41 mm Depth: 200 mm	None	110 min (EI 90)
200 mm	Width: 10 mm Depth: 100 mm	None	103 min (EI 90)
200 mm	Width: 30 mm Depth: 100 mm	None	50 min (EI 45)

b) Scientific and Technical Building Centre (CSTB)

Wall thickness (test with poured concrete)	Joint dimension	Joint backer	Fire resistance
200 mm	Width: 11 mm Depth: 200 mm	None	360 min
200 mm	Width: 20 mm Depth: 200 mm	None	360 min
200 mm	Width: 30 mm Depth: 100 mm	None	> 240 min
200 mm	Width: 40 mm Depth: 100 mm	None	> 180 min



Example of application: fire resistant sealing of connections between ceilings, partition walls and floors.

Applications

- Fire resistant installation and sealing of wooden window and door frames.
- Fire resistant sealing of connections between ceilings, partition walls and floors.
- Cavity filling.
- All applications where fire resistant characteristics are required, such as:
 - Filling of all openings in roof frames.
 - Bonding of insulation materials.
 - Improving thermal insulation in cold store areas.

Range of products

Colour

Pink



Installation

- Shake the can for at least 30 seconds.
- The surfaces to which **FIREFOAM 1C** is applied should be cleaned and free of dust and grease.
- Damp the surfaces in order to optimise adhesion and improve cell structure.
- Apply the foam with the valve pointed downwards.
- Fill cavities only partly (approximately 1/3), as foam will continue to expand.
- After use, clean the valve and extrusion nozzle with acetone.
- Application temperature: + 5°C to + 30°C.
- For the sprayable version, we can supply the appropriate spray guns.
- Use our **ODICLEANER** to clean spray guns and other application tools.

Packaging

FIREFOAM 1C is delivered in 750ml aerosol can packed in box of 12 units.

Storage

Store in a dry and cool area at a temperature of between + 5 °C and + 25 °C.
Shelf life: 12 months in the unopened original packaging.

Safety and hygiene measures

Apply the usual working hygiene.
Refer to the safety data sheet.
Wear gloves and safety glasses.
Remove cured foam by mechanical means only, never burn away.

IMPORTANT: while the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described or designs, data or information set forth, or that the products, designs, data or information may be used without infringing the intellectual property rights of others. In no case shall the descriptions, information, data or designs provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the descriptions, designs, data and information furnished by ODICE hereunder are given free of charge and ODICE assumes no obligation or liability for the description, designs, data and information given or results obtained, all such being given and accepted at your risk.



ODICE S.A.S. - Passive Fire Protection
Z.A.E Les Dix Muids - Rue Lavoisier - 97770 Marly - France
Tél. +33(0)3 27 19 32 32 - Fax : +33(0)3 27 21 06 26
Email : info@odice.com - www.odice.com