

# TECHNICAL DATASHEET

## B1 FireFoam – Hand Held & Gun Grade

### Description & Uses

AlphaChem B1 FireFoam is a high yield, high specification, one part, PU Expanding Foam is ideal for the filling and insulating of various joints, gaps and cavities in construction applications. In certain joint configurations the product is fire rated, according to EN 1366-4, and conforms to DIN4102-B1 Fire Class, to slow down the passage of flames and smoke. AlphaChem B1 Fire Foam has excellent acoustic and thermal properties

This product does not contain any propellant gases which are harmful to the ozone layer.

For Professional use.

Ideal for all applications where fire retardant properties are required, for example:

- Installation of door and window frames.
- Filling and sealing gaps, joints and cavities.
- Filling of penetrations in walls.
- Heat insulation of roof construction.
- Sealing of cable and pipe penetrations.
- Soundproofing and sealing partition walls.
- Bonding of insulation materials.
- Multi-Purpose, adhesion and fixation.

### Directions

- Ensure all surfaces are clean, sound, dry and free from dust, grease or other contaminants.
- Application temperature is between +5 °C and +30 °C. Always wear gloves and goggles when applying.
- **SHAKE THE CAN WELL BEFORE USE.**
- Moistening the surfaces and the foam improves adhesion and shortens the cure time.
- For the Hand Held version, screw the straw adapter onto the valve, **TURN THE CAN UPSIDE DOWN** and activate the foam by pressing the valve.
- For the Gun Grade version, screw onto an applicator gun, taking care not to overtighten. To apply the foam **TURN THE CAN UPSIDE DOWN** and press the trigger, the output of the foam can be regulated with the trigger and controlled with the adjustment screw on the back side of the gun.
- Always keep the can upside down during application.
- Partially fill the holes and cavities, as post expansion will completely fill the hole.



- Fresh foam can be cleaned by AlphaChem Foam Cleaner. Cured foam can be cleaned mechanically.
- When finished ensure can is stored upright.
- It is the user's responsibility to dispose of all packaging correctly.

### Storage

Store in cool, dry conditions between +5°C and +25°C.

### Shelf Life

12 months if stored correctly.

### Limitations

- Should be stored and transported in a vertical position.
- To get the best results, keep at room temperature for at least 12 hours before the application.
- Cured foam will discolour if exposed to ultraviolet light. Paint or coat the cured foam for best results in outdoor applications.
- Working at lower temperatures will decrease foam yield and cause longer curing time.
- It is the user's responsibility to ensure suitability for use.
- **Please read the label carefully prior to use as it contains essential health and safety information, it is advised that you should also read the SDS prior to use as this contains additional health and safety information to that found on the label.**

### Technical Data

<b>Curing System</b>	Moisture Cure
<b>Specific Gravity</b>	Hand Held: 22±3 Kg/cm <sup>3</sup> (ASTM D1622) Gun Grade: 19±3 Kg/cm <sup>3</sup> (ASTM D1622)
<b>Tack Free Time (1cm width)</b>	7±3 min (ASTM C1620)
<b>Cutting Time (1cm width)</b>	30-45min (ASTM C1620)
<b>Cure Time</b>	24 hours
<b>Yield</b>	41 litres approx
<b>Foam colour</b>	Pink
<b>Shrinkage</b>	0%
<b>Fire Class of the Cured Foam</b>	B1
<b>Thermal Conductivity</b>	0.036 W/m.k (at 20°C) (DIN 52612)
<b>Compression Strength</b>	0.03 MPa (DIN53421)
<b>Water Absorption</b>	Max 1 vol% (DIN 53428)
<b>Can Temperature</b>	+5 to +30°C
<b>Temperature Resistance</b>	-40 to +90°C
<b>Application Temperature</b>	+5 to +30°C

These results were obtained by providing optimum environmental conditions.

**AlphaChem B1 Hand Held and Gun Grade FireFoams Test Results using zero backing material  
Tested according to EN 1366-4**

Wall Thickness	Joint Dimension	Backing Material	Fire Resistance in minutes
200mm	Width: 11mm Depth: 200mm	None	235 min. Fire rating EI 180
200mm	Width: 31mm Depth: 200mm	None	147 min. Fire rating EI 120
200mm	Width: 41mm Depth: 200mm	None	114 min. Fire rating EI 90
100mm	Width: 11mm Depth: 100 mm	None	106min. Fire rating EI 90
100mm	Width: 21mm Depth: 100mm	None	64 min. Fire rating EI 60
100mm	Width: 31mm Depth: 100mm	None	52 min. Fire rating EI 25

**Further Information:**

In the event of further queries or problems concerning the use of this product, please contact the address below, e-mail [info@cromar.uk.com](mailto:info@cromar.uk.com).

*All products should be sold in accordance with the manufacturer's instructions. The manufacturer cannot be held responsible where conditions of use are beyond our control. Cromar Building Products Limited products' are available for sale in accordance with Cromar Building Products Limited standard conditions of sale, which is available upon request. Whilst any information contained herein is to the best of our knowledge true and accurate, no warranty is given or implied in connection with any recommendations, agents, or distributors, as the conditions of use and any labour involved are beyond our control. Our warranty is therefore limited to the quality of supplied product.*