



## **GREAT STUFF PRO Multi Purpose Fire Rated**

Gun (750 ml) and Straw (750 ml)  
Class B1 per DIN 4102 - 1

### **Description**

**GREAT STUFF\* PRO Multi Purpose Fire Rated** is a moisture-curing one-component polyurethane aerosol foam sealant. It contains an environmentally safe propellant, which complies with the latest EU regulations banning all CFC- and HCFC-propellants. The cured foam, applied at solid mineral material such as concrete, corresponds to Construction Class B1 according to DIN 4102 - 1 when applied at specified gap depth and width. For all other applications it corresponds to Construction Class B2

### **Typical areas of Application**

General applications where fire retardant characteristics are required\*:  
Restoring the original fire rating for specific penetrations\* in fire rated walls or floors,  
Sealing connection joints between different building materials (ex: roller blinds),  
As an aid to mechanically fixing and insulating window frames and entrance door linings,  
Filling and insulating gaps, cracks and cavities within various building materials.  
\* Refer to DIN 4102-1 report as well as Warrington test report No. 122136 for the specific gap sizes and test conditions.

### **Typical Product Properties**

GREAT STUFF PRO Multi Purpose Fire Rated adheres to most common building materials including wood, concrete, wallboard and plastic, with the exception of smooth surfaced polyethylene, silicone, oil and grease or similar substrates.

GREAT STUFF PRO Multi Purpose Fire Rated can be used at temperatures from +5°C to +25°C, the optimal processing temperatures being from 18°C to 25°C.

Full foam setting time is 12 hours. The fully set foam is semi-rigid and predominantly close-celled.

Once fully set, the foam can be trimmed, sawn, sanded, painted or plastered over.

It is thermally stable between -30°C and +80°C. It is durable and permanent except when exposed to UV-rays. Foam exposed to UV light should be painted or covered.

The heat insulation values are excellent.

When tested in accordance with the general principles of BS 476 Pt 20:1987, the foam gave a fire rating of up to 4 hours (refer to test conditions Warrington test report No. 122136).

Using the GREAT STUFF PRO GUN FOAM will guarantee superior dispensing control and maximum reusability.

## **Recommended Process Conditions**

Prior to applying the foam, surfaces must be firm, clean, and free of dust, grease or loose particles. To speed up the curing process, surfaces can be lightly misted with water prior to applying the foam.

We recommend covering the floor and working surfaces with paper or plastic sheeting to protect against drips. It is advisable to have GREAT STUFF PRO GUN CLEANER at hand.

The ideal working temperature for both the environment and the can content is +20°C.

Always wear gloves and protective eyewear when dispensing GREAT STUFF Multi Purpose Fire Rated.

## **Recommended Process Application**

The following instructions must be strictly observed:

Shake the can vigorously for 30 seconds. Screw the threaded end of the straw assembly or the gun onto the valve. Care must be taken not to over tighten the dispensing assembly. During processing, the can must be held inverted with the valve in bottom position. To extrude the foam, pressure has to be carefully applied to the straw or gun trigger. The gun trigger can be adjusted by turning the round knob at the rear of the gun dispenser.

The fresh foam will expand after application; therefore care must be taken not to overfill joints.

**Please note:** Moisture is needed for an even and rapid curing of the foam. Inadequate moistening or overfilling of joints and cavities may lead to poor cure or unwanted excessive post-expansion of the foam.

In the case of gaps larger than 3 x 3 cm, it is recommended to fill by applying several layers of foam, allowing each to cure.

Fresh foam spills must be removed immediately within the Tack-Free time using GREAT STUFF PRO GUN CLEANER. Once foam is cured, it can be removed mechanically.

When using a gun applicator: During relatively short work stoppages, leave the gun dispenser on the can and screw in proportioning screw completely. When a can becomes empty, immediately screw the gun onto another can. During relatively long stoppages, unscrew the can and clean the gun with GREAT STUFF PRO GUN CLEANER.

Once a gun can has been started, it should be used within four weeks.

When using straw assembly: Once opened, the foam will solidify in the straw or in the valve within 20-60 minutes, depending on ambient conditions. Prepare in advance to carry out all foaming at once.

If aerosol can has become bonded to a straw assembly or gun, do not use force to loosen it, as there is danger of uncontrolled product release.

If product does not flow easily, do not force product out of can.

## Handling and Storage

Store and transport cans always in an upright position and in dry conditions.  
Storage temperature: 15°C – 25°C  
Cans should not be stored in hot areas, such as vehicles in direct sunlight.  
Shelf life: 12 months

## Packaging

Tinplate cans: 750 ml  
Carton: 12 cans each

## Typical Physical Properties <sup>(1)</sup>

	Units	Gun (750 ml)	Straw (750 ml)	Test Method
Free rise density	Kg/m <sup>3</sup>	16	18	DIN 53420
Density (3 cm gap)	Kg/m <sup>3</sup>	20	25	DIN 53420
Colour		Pink	Pink	Visual
Yield	l	45	39	Dow internal method
Tack free time	min	8	9	Dow internal method
Cut time	min	14	17	Dow internal method
Tensile strength	N/cm <sup>2</sup>	8	18	DIN 53430
Compressive strength	N/cm <sup>2</sup>	3	5	DIN 53421
Shear strength	N/cm <sup>2</sup>	3	8	DIN 53427
Construction material class		B1 <sup>(2)</sup>	B1 <sup>(2)</sup>	DIN 4102 - 1

- Based on test methods mentioned above, all data are given for non-aged foam evaluated @ 20°C, 50 % relative humidity. Yield is lower for aged foam. Special applications must be tested individually. For better results, premoisten the surface before dispensing the foam.
- Certificate No. P-NDS04-466 of the MPA BAU Hannover

## Fire Test Results <sup>(3)</sup>

Test Reference	Gap width (mm)	Seal Depth (mm)	Orientation	Description	Integrity (mins)	Insulation (mins)
A	45	220	Wall mounted	PU foam/mineral fibre core	240	240
B	30	220	Wall mounted	PU foam/mineral fibre core	240	240
C	20	180	Wall mounted	PU foam	86	86
D	15	220	Wall mounted	PU foam	240	240
E	15	120	Wall mounted	PU foam	71	69
F	45	250	Floor mounted	PU foam/mineral fibre core	240	240
G	30	250	Floor mounted	PU foam/mineral fibre core	240	240
H	20	140	Floor mounted	PU foam	115	113
I	15	100	Floor mounted	PU foam	59	58
J	15	200	Floor mounted	PU foam	206	206

- The performance of the specimens was assessed against the integrity and insulation (maximum temperature rise) performance criteria of BS 476: Part 20: 1987.  
For more detail on test conditions, please refer to Warrington test report No. 122136.

## **Safety Considerations**

Material Safety Data (MSD) sheets are available from The Dow Chemical Company. MSD sheets are provided to help customers satisfy their own handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations. MSD sheets are updated regularly, therefore, please request and review the most current MSD sheet before handling or using any product. These are available from the nearest Dow sales office.

## **Customer Notice**

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### **Contact information :**

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<http://www.dow.com/pusystems/index.htm>

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