

#### GREAT STUFF™ PRO FR - Fire rated

Gun and Straw (750 ml)

Fire resistance: Up to 5 hours (BS 476 – Report 189853)

Up to 4 hours (EN1366-4 - Report 305492)

Class B1 (DIN 4102 - 1)

#### Description

GREAT STUFF™ PRO FR is a moisture-curing one-component polyurethane aerosol foam sealant. It contains an environmentally safe propellant, which complies with the latest EU regulations ((EC) No 842/2006) on the use of fluorinated greenhouse gases in One Component Polyurethane products.

It is classified B1 according to DIN 4102-1 and has a fire resistance up to 5 hours according BS476: Part20: 1987, and 4 hours (El 240) according EN1366-4: 2006. Specific test conditions and test reports are available on demand.

### 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,
- Aid to mechanically fixing and insulating window frames and entrance door linings,
- Filling and insulating gaps, cracks and cavities within various building materials.

### Typical Product Properties

GREAT STUFF™ PRO FR 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 FR can be used at temperatures from +5°C to +30°C, the optimal processing temperatures being from 18°C to 25°C. Full foam setting time is 12 hours. The Foam can be cut after 1 hour. Once fully set, the foam can be trimmed, sawn, sanded, painted or plastered over.

It is thermally stable between  $-40^{\circ}$ C and  $+100^{\circ}$ 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.

# Recommended Process Conditions

Prior to applying the foam, surfaces must be firm, clean, and free of dust, grease or lose 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.

# Recommended Process Application

The following instructions must be strictly observed:

Always wear gloves and protective eyewear when dispensing GREAT STUFF™ PRO FR.

Shake the can vigorously for 30 seconds. Screw 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.

#### 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.

#### <u>Using straw assembly:</u>

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: 18 months

#### **Packaging**

Tinplate cans: 750 ml Carton: 12 cans each

## Typical Physical Properties (1)

	Units	Gun (750 ml)	Straw (750 ml)	Test Method
Funn wine demaits:	I/ o: / oo 3	16	10	DIN 52420
Free rise density	Kg/m³	16	18	DIN 53420
Density (3 cm gap)	Kg/m³	20	25	DIN 53420
Colour		Pink	Pink	Visual
Yield (2)	I	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
		B1 <sup>(3)</sup>	B1 <sup>(3)</sup>	DIN 4102 - 1
Fire performance / classification		EI 240 (4)	EI 240 (4)	EN1366-4: 2006
		5hrs (5)	5hrs (5)	BS476: Part20: 1987

<sup>1.</sup> Based on test methods mentioned above, all data are given for non-aged foam evaluated @ 20°C, 50 % relative humidity.

<sup>2.</sup> Yield is calculated based on 30mm diameter bead density. Yield is lower for aged foam.

<sup>3.</sup> Certificate No. P-NDS04-780 of the MPA BAU Hannover.

<sup>4.</sup> Classification report Ref. 305492 - Exova Warringtonfire.

<sup>5.</sup> Test report Ref. 189853 - Exova Warringtonfire.

#### 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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