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bond it

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PU FOAMS AND ADHESIVES

FIRE RESISTANT B1 PU EXPANDING FOAM

Description

A one component polyurethane foam, tested for fire resistance top EN1366-4:2006. Available in aerosol or gun grade canisters.

Bond It **FIRE RESISTANT EXPANDING FOAM** is a one-component polyurethane assembly foam, and is based on a moisture curing polyurethane prepolymer. It contains an environmentally safe propellant, which complies to the latest EU regulations banning all CFC-propellants.

Uses

The fresh foam adheres to all common building materials except from surfaces such as polyethylene, silicone, oil and grease and similar substrates.

Areas of Application:

- window setting (where a clean and controlled backfill is required),
- roller shutters (sealing of connection joints),
- entrance door linings,
- any kind of small breakthroughs in walls and other cavities.

Properties

The foam can be used at temperatures from +5°C to +25°C. The cured foam is semi-rigid and predominantly close-celled. It is resistant to temperatures ranging from -40°C to +100°C and to ageing, but not to UV-rays. Noise and heat insulation values are excellent. ***This foam meets the requirements of Construction Materials Class B1 rating in accordance with DIN 4102 Part 1.***

Preparation

Surfaces to be bonded must be firm, clean, dry and free from dust, grease or contaminants that may hinder adhesion. They must be moistened well with water. It is advisable to apply a primer well penetrating into the ground if necessary. All construction components must be properly prepared prior to foam application. It is advisable to have Foam Cleaner at hand.

The ideal working temperature for both the can and environment is +20°C. Chilled cans must be carefully warmed in luke-warm water before usage. However, the can must not be heated above +50°C, as there is a risk of bursting. Cans which are too hot, for example after having been left in a vehicle during summer, must be cooled in water. The can should be shaken occasionally during this process to obtain the required temperature faster.

Prior to work, and before the adaptor is attached, the can must be shaken thoroughly at least 15 - 20 times. Then the adaptor is attached firmly to the valve. Care must be taken not to overtighten the adaptor and not to activate the valve during this process.

Application

The instructions for the can must strictly be observed. The fresh foam will expand by 1 ½ to 2 times. Therefore care must be taken not to overfill joints. Fresh foam spills must be removed immediately within the tack-free time with Foam Cleaner. Cured foam must be removed mechanically.

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 an unwanted post-expansion of the foam.

Foam extrusion can be controlled accurately by varying the pressure or by tilting the adaptor. For foam extrusion the valve is pointed down. The valve lever is to be activated carefully.

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

Container Size

750ml aerosol and gun-grade canisters.

Storage Conditions

Store and transport upright, in cool, dry conditions (Considerably higher temperatures may reduce the shelf-life). Shelf life is 12 months.

Disposal of Containers

Do not leave empty containers where residue could be harmful to children, animals or the environment. Replace lids and remove any containers to a central disposal point in accordance with local regulations.

Do not pierce or burn can after use.In the event of spillage remove all sources of ignition, ventilate the area, remove people from confined areas. Material should be mopped up immediately with an inert absorbent material such as sand.

Health & Safety

Phosphoric trichloride, reaction products with propylene oxide; Butane; Dimethyl ether. Extremely Flammable aerosol. Please refer to separate material safety data sheet for full handling, use and storage instructions. Keep out of reach of children. It is the users responsibility to determine suitability for use. If in doubt contact our Technical Department for advice.

Note: this information is for general guidance only, since site conditions and labour are beyond our control. It is recommended that users make their own tests to determine suitability.

Specification Summary

(determined at +23°C, 50% relative air humidity)

Yield, free expansion	bulk density approx 20-25kg/m³
750 ml can	approx 38 litres
Cell-structure	Predominantly closed cell, medium-fine
Tack-free	9-11 minutes
Cuttable (30mm bead)	after 30-40 minutes
Full cure @ 23°C	minimum 18hours
Minimum working temperature (Can, application surfaces)	+5x°C
Maximum working temperature (Can, application surfaces)	+25°C
Optimum working temperature (Can, application surfaces)	+20°C
Tensile strength (in accordance to BS 5241)	10 N/cm²
Compressive strength at 10% stress (in accordance to DIN 53421)	3 N/cm²
Water absorption (in accordance to DIN 53433)	0.3 Vol.-%
Thermal conductivity approx.	0.03 W/mK
Temperature resistance of the cured bead	
Long-term	-50°C to +90°C
Short-term	-65°C to +130°C

Container Sizes:

Code:	BDEFR750	BDEFRG750
Size:	750ml	750ml
Barcodes:	5060021360236	5060021363756

The data given herein is intended as a general guideline only. Actual results achieved may vary with working conditions and the materials involved; which are beyond the control of the manufacturer. Results achieved may not constitute any ground for a claim against the manufacturer. The manufacturer can only guarantee the quality of the product itself. This data sheet cancels and replaces all previous editions.

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