

## Low expansion polyurethane foam for doors, windows and curtain walls

### DESCRIPTION

ADFOAM 1825 is a one-component, self-expanding, ready to use polyurethane foam. It is used for insulation on windows, doors, curtain wall perimeters or any others gaps that need to be filled. ADFOAM 1825 meets CAN/ULC S102 and ASTM E84 (UL R26654). It contains CFC-free propellants, which are completely harmless to the ozone layer. ADFOAM 1825 reaches R5 (thermal resistance) per square inch insulation rate. It adheres to most common construction materials and can also be used in plumbing and electrical applications.

### **PHYSICAL PROPERTIES**

Base	Single component polyurethane		
Color	Champagne		
Consistency	Stable foam, thixotropic		
Curing system	Moisture cure		
Drying time at 20°C (68°F) and 65% RH	Dust-free after 20-25 minutes		
Skin formation time at 20°C (68°C) and 65% HR	±8 minutes		
Curing rate	See chart below		
Yield	See chart below		
Shrink	None		
Post expansion	None		
Cellular Structure	70-80% closed cell		
Specific gravity	±23kg/m <sup>3</sup> (extruded, fully cured)		
Temperature resistance	-40°C to +90°C when cured		
Fire Class (DIN 4102 part 2)	B3		
Insulation factor	32mW/m. K		
Shear strength (DIN 53427)	17 N/cm <sup>2</sup>		
Pressure strength (DIN 53421)	3 N/cm <sup>2</sup>		
Bowing strength (DIN 53423)	7 N/cm <sup>2</sup>		
Water absorption (DIN 53429)	Approximately 1% Vol		
V.O.C.	201 g/L		

## **PRODUCT CHARACTERISTICS**

- Minimal expansion, will not cause any distortion
- Excellent adhesion on most substrates (except Teflon, PE and PP)
- High thermal and acoustical insulation
- Very good filling capacities
- Excellent mounting capacities
- Excellent stability (no shrink or post-expansion)
- Does not slump at low temperature
- Can be applied at low temperatures
- Very precise application due to the foam gun system





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## APPLICATIONS

- Installion of window and doorframe
- Filling cavity
- Sealing of all openings in roof construction
- Creation of a soundproof screen
- Mounting and sealing of window and doorframe
- Connecting insulation materials and rood constructions
- Improving thermal insulation in cooling system

## **SPÉCIFICATIONS**

Meet norm CAN/ULC S102 (Canada).



Caulking and sealants surface burning characteristics 19HU applied to inorganic reinforced cement board. Flame spread : 30 Smoke developed : 50

Meet norm ASTM E84 (USA).



Caulking and sealants surface burning characteristics 19HU applied to inorganic reinforced cement board. Propagation de la flamme : 15 Développement de fumée : 35



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### **METHOD OF USE**

All surfaces must be free of dust, oil, grease, frost or any other contaminant. Clean all surfaces with ADFOAM CLEANER 500. Let evaporate 20 minutes prior to ADFOAM 1825 application. Shake the aerosol can for at least 30 seconds. Fit the gun on the adapter. Moisten surfaces with a water spray prior to application (only when temperature > 0°C (32°F)). Fill holes and cavities at 65% as the foam will expand. The size of a foam bead should be between 1/8 and 3 inches. Repeat shaking regularly during application. If you have to work in layers repeat moistening after each layer (only when temperature >0°C (32°F)). Fresh foam can be removed using ADFOAM CLEANER 500 gun cleaner. Cured foam can only be removed mechanically. For later utilization, when there is still some foam inside the can, keep the can screwed on the gun. Cured foam may be trimmed or sanded. Cured foam must be protected from UVB radiation by painting or applying a top layer of sealant (silicone or hybrid sealant). Application temperature: -25°C (-13°F) to 35°C (95°F).

### **YIELD AND CURING TIME**

Temperature of the can: 18°C

Temperature	20°C (68°F)	0°C (32°F)	-10°C (14°F)	-25°C (-13°F)
Cured foam volume	± 65 liters	± 40 liters	± 35 liters	± 30 liters
	± 3966 in <sup>3</sup>	± 2441 in <sup>3</sup>	± 2136 in³	± 1830 in³
Curing time in joint of 3cm x 3cm	1.5 hour	3 to 5 hours	8 to 10 hours	10 to 12 hours

## PACKAGING

Can of 870ml

#### SHELF LIFE

12 months from date of production, in an unopened packaging in a cool and dry storage place between +5°C (41°F) and +25°C (77°F). Always store can with the valve pointed upwards.

#### HANDELING AND SAFETY

Apply the usual industrial hygiene. Wear gloves and safety goggles. Remove cured foam by mechanical means only, never burn away. Consult the Safety Data Sheet for more information. If you need additional information, do not hesitate to contact your technical representative. Always test product on your particular application prior to use. For industrial use only.



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## IMPORTANT

## **READ CAREFULLY**

The information and recommendations contained herein are derived from our research and information from other reliable sources. This data applies only to our products and not when used with other products. We believe in the reliability of our information. However, no guarantee is offered to that effect. It is the responsibility of the buyer to verify this data according to their own operating conditions to ensure that they conform to the purpose for which the product is intended, even before using it.

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