

PROFOAM™ 1815

TECHNICAL SHEET

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Rigid
polyurethane
board with a
density of 15 lbs

CHARACTERISTICS

Special formulation allowing the creation of shavings when machining the board

Anti-static additive allowing particles to fall to the ground rather than remaining suspended in the air

Excellent consistency and uniformity properties throughout the material

Fine cellular structure allowing for a superior finish with most resin or coating systems

Bears no glass bead filler. Prevents damage to the cutting tools. Excellent dimensional stability. Resistant to warping and decay.

DESCRIPTION

PROFOAM™ 1815 is a tough and durable closed-cell polyurethane, machinable board. This product is primarily used in scenic and/or motion picture decor applications, in sign making, as a pattern in molding and foundry as well as in general machining where dimensional stability and uniform finish properties are required.

PROFOAM™ 1815 can be used in interior or exterior projects, as this product is flame retardant and water resistant.

ADDITIONAL INFORMATION

- Boards in stock are all 2,000 mm long by 1,000 mm wide;
- Thicknesses are 25.4 mm, 38 mm, 50 mm, 75 mm, 100 mm and 150 mm;
- HSS shank cutters are to be used to machine the boards;
- Product allows the reproduction of a 3D effect in the field of signs.

INSTRUCTIONS

PROFOAM™ 1815 can be assembled, filled, sealed, and painted with most commercial finishing products. Our customers agree to tell us about the optimal results when using automotive and wood refinishing products. However, the range of usable products is not limited to these proposals.

All PROFOAM™ products are made of polyurethane resin. One of the main characteristics of polyurethane is without a doubt its chemical resistance, which allows the use of a wide variety of adhesives to assemble the boards, without damaging them. Also, all our polyurethane boards are made of closed cells and are extremely resistant.

Adhesives that have demonstrated assembly quality on our PROFOAM™ 1815 rigid boards are room-temperature reactive curing adhesives, i.e. adhesives that cure at the junction/assembly joint. The following products are used to assemble PROFOAM™ boards:

- Epoxy systems;
- Cyanoacrylates;
- Polyurethane adhesives;
- Acrylic adhesives.



Contact

POLYMÈRES TECHNOLOGIES

for more information:

support@polymerestechologies.com

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BASIC RELEVANT INFORMATION

DESCRIPTION	Polyurethane board
APPEARANCE	Peach-colored
CHEMICAL RESISTANCE	Resists to almost all chemicals except strong bases and acids
DIMENSIONAL STABILITY	Good to excellent

TYPICAL PROPERTIES (AT 22 °C / 72 °F)

TESTS	METHOD	RESULTS	
DENSITY	ASTM D 1623	(lbs/ft³)	15
HARDNESS	ASTM D 2240	Shore D	23
COMPRESSIVE STRENGTH	ASTM D 1621	Mpa	3.6
FLEXURAL STRENGTH	ASTM D 1621	Mpa	5.1
THERMAL EXPANSION COEFFICIENT	(10⁶K⁻¹)	65	
THERMAL CONDUCTIVITY	At 10°C (W/mK)	N/A	
GLASS TRANSITION TEMPERATURE	Tg	(°C)	80
SLEF-EXTINCTION		Self-extinguishable	

MACHINING PARAMETERS

	CUTTING SPEED (rpm)	FEED PER TURN FOR ONE TOOTH (ipm)
DRAFT	2,500	120
FINISH	5,000	200



PRECAUTIONS

- Consult the material safety data sheet before use.
- Handle this product by following the usual safety rules and measures.
- Ensure good ventilation.
- Wear gloves, safety glasses, and protective clothing.
- Do not smoke while machining.
- Store the boards in a cool, dry area.

It is recommended to follow provincial and federal safety regulations. In case of eye contact, rinse well with water. In case of skin contact, rinse with soap and water. Keep away from children.

ASSUMPTION OF RISK

The customer assumes all risk and liability for the results obtained by the use of any POLYMÈRES TECHNOLOGIES product, including, without limiting the generality of the foregoing, the use of the CHILL EPOXY™ line of products, and the use of any process, whether in terms of general effectiveness, success, or failure, and regardless of any oral or written statement made by way of technical advice or otherwise, related to the use of any POLYMÈRES TECHNOLOGIES product.

sales@polymerestechologies.com

6330 Boulevard Laurier O, Saint-Hyacinthe, QC J2S 9A7

+1 (450) 250-3058