



Density 1.8 pcf (28.8 kg/m³)
Maximum Loading 2.0 psi (13.8 kPa)
Color Natural



ETHAFOAM™
packaging products

ETHAFOAM™ DURALITE™ FR Polyethylene Foam

ETHAFOAM™ DURALITE™ FR polyethylene foam is a strong, resilient, closed-cell foam with a density of 1.8 pcf (28.8 kg/m³). ETHAFOAM DURALITE FR is an improved product designed specifically for aircraft seating. It is lighter and offers a more comfortable seat while still meeting commercial airline requirements. It contains flame-retardant additives designed to meet the U.S. Federal Standard FAR 25.853 (a) for commercial aircraft interior compartment components.

ETHAFOAM DURALITE FR has outstanding dimensional stability and recovery characteristics that provide optimal cushioning protection against repeated impacts. To achieve optimum performance, Dow recommends that qualified packaging engineers design the total packaging solution.

Size Available in Natural (Planks):
2" x 24" x 108"

Product Features

ETHAFOAM™ DURALITE™ FR polyethylene foam is a durable, lightweight, flexible, solid extruded product that meets the requirements for U.S. Federal Standard FAR 25.853 (a). The foam also meets or exceeds the requirements in CID A-A-59136, Class 1, Grade C, Type I. As the properties listed on the reverse suggest, ETHAFOAM DURALITE FR offers excellent strength, resistance to creep under load, vibration and shock absorbency, and water resistance characteristics.

ETHAFOAM DURALITE FR is produced with Dow's patented *RapidRelease* manufacturing process. *RapidRelease* technology delivers a higher quality product with improved dimensional stability and safety. This process technology incorporates a patented CFC- and HCFC-free blowing agent system and an accelerated curing system that reduces residual blowing agents in ETHAFOAM products to trace amounts.

ETHAFOAM DURALITE FR meets the requirements of the U.S. Clean Air Act Amendments. It is easily fabricated, impervious to most chemicals, non-abrasive and performs consistently over a wide range of temperatures.

ETHAFOAM DURALITE FR is also reusable and completely recyclable because it is made of non-crosslinked polyethylene. Recycling operators may wish to segregate product with flame-retardant additives and process it separately. Flame-retardant additives in ETHAFOAM DURALITE FR may increase polymer degradation in some high-temperature recycling operations.

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Product Information

Physical Properties of ETHAFOAM™ DURALITE™ FR Polyethylene Foam			
Physical Properties ¹	Test Method	Direction	Value
Density	ASTM D3575, Suffix W, Method B; ISO 845		pcf (kg/m ³) 1.8 (28.8)
Fire Test Response Characteristics ^{1†}	US CFR Title 14, 25.853 (a)		Pass
Compression Set	ASTM D3575, Suffix B (50% compr.); EN/ISO 1856 (25% compr.)	Vertical	< 20% < 10%
Compressive Creep (1000 hrs @ 73°F [23°C])	ASTM D3575, Suffix BB	Vertical	< 10% @ 2.0 psi (13.8 kPa)
Compressive Deflection @ 10% @ 25% @ 50%	ASTM D3575, Suffix D	Average	psi (kPa) 6 (41) 9 (65) 18 (124)
Thermal Stability	ASTM D3575, Suffix S; ISO 2796		< 1.5% < 2.0%
Thermal Conductivity @ 75°F (24°C)	ASTM D3575, Suffix V; EN 28301; ISO 2581	Vertical	BTU•in/hr•ft ² •°F (W/m ² K) 0.37 (0.05)
Water Absorption	ASTM D3575, Suffix L; ISO 2896; ASTM C272		lb/ft ² (kg/m ²) 0.3 (1.5) < 3% by volume
Buoyancy	ASTM D3575, Suffix AA		pcf (kg/m ³) 58 (930)
Tensile Strength @ peak	ASTM D3575, Suffix T; ISO 1798	Average	psi (kPa) 32 (220)
Tensile Elongation	ASTM D3575, Suffix T; ISO 1798	Average	68%
Tear Strength	ASTM D3575, Suffix G	Average	lb/in (N/mm) 9 (1.6)

¹The data presented for this product are for unfabricated ETHAFOAM polyethylene foam products. While values shown are typical of the product, they should not be construed as specification limits.

[†]These numerical laboratory fire-test-response characteristics are not intended to reflect hazards presented by this material under actual fire conditions.

*For information on products, design assistance
and testing services available from Dow, contact us at:
1-866-PKG-FOAMS (754-3626) or www.ethafoam.com*

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WARNING: ETHAFOAM polyethylene foam products are combustible and may constitute a fire hazard if improperly used or installed. During transportation, storage, installation and use, these products should not be exposed to open flame or other ignition sources.

ETHAFOAM PACKAGING PRODUCTS
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