



Density
10.0 pcf (160.2 kg/m³)
20.0 psi (138 kPa)
Color
Black

ETHAFOAM™ M5 Polyethylene Foam

ETHAFOAM™ M5 polyethylene foam is a strong, resilient, high-density 10.0 pcf (160.2 kg/m³), closed-cell foam. It is specially formulated to meet the stringent military and blowing agent requirements (less than 10% LEL), and is an excellent material for cushioning components in packaging applications for loadings up to 20.0 psi (138 kPa).

ETHAFOAM M5 has outstanding dimensional stability and recovery characteristics that provide optimal cushioning protection against repeated impacts. To achive optimum performance, Dow recommends that qualified packaging engineers design the total packaging solution.

Size Available in Black (Planks):

2" x 24" x 108"

Product Features

ETHAFOAM™ M5 polyethylene foam is a durable, lightweight, flexible, solid extruded product. The foam meets or exceeds the requirements in CID A-A-59136, Class 1, Grade A, Type V, and PPP-C-1752D, Type V, Grade A. As the properties listed on the reverse suggest, ETHAFOAM M5 offers excellent strength, resistance to creep under load, vibration and shock absorbency, and water resistance characteristics. ETHAFOAM M5 is part of an exclusive family of ETHAFOAM military packaging products that also includes ETHAFOAM™ M1, ETHAFOAM™ M1 AS, ETHAFOAM™ M1 FR/AS, ETHAFOAM™ M3 and ETHAFOAM™ M4. Each of these products has been designed and formulated to consistently meet the stringent shipping, storage and handling requirements for military applications.

ETHAFOAM M5 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 M5 meets the requirements of the U.S. Clean Air Act Amendments. It is easily fabricated, impervious to most chemicals, nonabrasive and performs consistently over a wide range of temperatures.

ETHAFOAM M5 is also reusable and completely recyclable because it is made of non-crosslinked polyethylene.

Flammability

ETHAFOAM™ M5 polyethylene foam has successfully passed FMVSS 302 flammability testing, conducted according to the U.S. Code of Federal Regulations, CFR 49.

ETHAFOAN

Physical Properties [†]	Test Method	Direction	Value
Density	ASTM D3575, Suffix W, Method B; ISO 845		pcf (kg/m³) 10.0 (160.2)
Blowing Agent Content	Dow Method		< 10% LEL
Compression Set	ASTM D3575, Suffix B, (50% compr.)	Vertical	< 15%
Compressive Creep (1000 hrs @ 73°F [23°C])	ASTM D3575, Suffix BB	Vertical	< 10% @ 20.0 psi (138 kPa)
Compressive Deflection @ 10% @ 25% @ 50%	ASTM D3575, Suffix D	Average	psi (kPa) 84 (579) 88 (607) 132 (910)
Thermal Stability	ASTM D3575, Suffix S; ISO 2796		< 1.0%
Thermal Conductivity @ 75°F (24°C) @ 23°F (-5°C)	ASTM D3575, Suffix V; EN 28301; ISO 2581	Vertical	BTU•in/hr•ft²•°F (W/m°K) 0.42 (0.06) 0.37 (0.05)
Water Absorption	ASTM D3575, Suffix L; ISO 2896; ASTM C272		lb/ft² (kg/m²) 0.2 (1.0) < 1% by volume
Buoyancy	ASTM D3575, Suffix AA		pcf (kg/m³) 52 (833)
Tensile Strength @ peak	ASTM D3575, Suffix T; ISO 1798	Average	psi (kPa) 160 (1100)
Tensile Elongation	ASTM D3575, Suffix T; ISO 1798	Average	30%
Tear Strength	ASTM D3575, Suffix G	Average	lb/in (N/mm) 54 (9.5)

The 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.

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

NOTICE: No freedom from any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. Dow assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

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 THE DOW CHEMICAL COMPANY P.O. Box 1206 • Midland, MI 48641-1206 • USA www.ethafoam.com



Form No. 172-01421X-0506P&M