



Density 4.0 pcf (64.1 kg/m<sup>3</sup>)  
Maximum Loading 5.0 psi (34.5 kPa)  
Color Black, Natural



**ETHAFOAM™**  
packaging products

## ETHAFOAM™ 400 Polyethylene Foam

ETHAFOAM™ 400 polyethylene foam (same as ETHAFOAM™ HS-45) is a strong, resilient, high-density 4.0 pcf (64.1 kg/m<sup>3</sup>), closed-cell foam. It is ideally suited as a component material in products requiring a shock absorbing, vibration dampening, insulating, barrier and/or buoyancy component, and as a material for cushioning components in packaging applications for loadings up to 5.0 psi (34.5 kPa).

ETHAFOAM 400 has outstanding dimensional stability and recovery characteristics that provide optimal cushioning protection against repeated impacts. It is ideal for cushion packaging and is used in many applications, including computer, automotive, construction and recreation. To achieve optimum performance, Dow recommends that qualified packaging engineers design the total packaging solution.

### Sizes Available in Black (Planks):

2" x 24" x 108"  
4" x 24" x 108"

### Sizes Available in Natural (Planks):

2" x 24" x 108"  
3" x 24" x 108"

### Product Features

ETHAFOAM™ 400 polyethylene foam is a durable, lightweight, flexible, solid extruded product. As the properties listed on the reverse suggest, ETHAFOAM 400 offers excellent strength, resistance to creep under load, vibration and shock absorbency, and water resistance characteristics.

ETHAFOAM 400 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 400 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 400 is also reusable and completely recyclable because it is made of non-crosslinked polyethylene.

### Flammability

ETHAFOAM™ 400 polyethylene foam has successfully passed FMVSS 302 flammability testing, conducted according to the U.S. Code of Federal Regulations, CFR 49.

**ETHAFOAM**  
Product Information

Physical Properties of ETHAFOAM™ 400 Polyethylene Foam			
Physical Properties <sup>1</sup>	Test Method	Direction	Value
Density	ASTM D3575, Suffix W, Method B; ISO 845		pcf (kg/m <sup>3</sup> ) 4.0 (64.1)
Compression Set	ASTM D3575, Suffix B (50% compr.)	Vertical	< 15%
Compressive Creep (1000 hrs @ 73°F [23°C])	ASTM D3575, Suffix BB	Vertical	< 10% @ 5.0 psi (34.5 kPa)
Compressive Deflection @ 10% @ 25% @ 50%	ASTM D3575, Suffix D	Average	psi (kPa) 17 (117) 19 (131) 32 (221)
Thermal Stability	ASTM D3575, Suffix S		< 1%
Thermal Conductivity @ 75°F (24°C) @ 23°F (-5°C)	ASTM D3575, Suffix V; EN 28301; ISO 2581	Vertical	BTU•in/hr•ft <sup>2</sup> •°F (W/m <sup>2</sup> K) 0.42 (0.06) 0.37 (0.05)
Water Absorption	ASTM D3575, Suffix L; ISO 2896; ASTM C272		lb/ft <sup>2</sup> (kg/m <sup>2</sup> ) 0.2 (1.0) < 1% by volume
Buoyancy	ASTM D3575, Suffix AA		pcf (kg/m <sup>3</sup> ) 58 (930)
Tensile Strength @ peak	ASTM D3575, Suffix T; ISO 1798	Average	psi (kPa) 50 (345)
Tensile Elongation	ASTM D3575, Suffix T; ISO 1798	Average	70%
Tear Strength	ASTM D3575, Suffix G	Average	lb/in (N/mm) 19 (3.7)

<sup>1</sup>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](http://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.

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