

# ETHAFOAM 221 A/S

### Brand Polyethylene Foam Sheet

ETHAFOAM\* 221 A/S polyethylene foam is a strong, resilient, medium density 35 kg/m<sup>3</sup> (2.2 pcf), closedcell foam. It contains anti-static agents designed to eliminate electrostatic potential from the foam itself, and to dissipate electrostatic discharges from other sources. EHTAFOAM 221 A/S polyethylene foam is ideally suited as a component material in products requiring a shock absorbing, vibration dampening, insulating, buoyancy component, and as a material for cushioning components in packaging applications for light-to medium-weight items.

#### Size available (Rolls):

3 x 1200 x 182000 mm (1/8" x 48" x 600') 6 x 1200 x 91000 mm (1/4" x 48" x 300') 12 x 1200 x 46000 mm (1/2" x 48" x 150')

Color available: Pink

Physical Properties <sup>†</sup>	Test Method	Direction	Value
Density	ASTM D3575, Suffix W, Method B; ISO 845		<u>kg/m<sup>3</sup> (pcf)</u> 35 (2.2)
Static Decay Rate	EIA 541; US Federal Test Standard 101C Method 4046.1		< 2 sec
Surface Resistance	ANSI/EOS/ESD-S11.11-1993 Measured at plank surface		< 10 <sup>11</sup> ohms
Surface Resistivity	EIA 541; ASTM D257 Measured at plank surface		< 10 <sup>12</sup> ohms/square
Compressive Deflection @ 10% @ 25% @ 50%	ASTM D3575, Suffix D	Average	<u>KPa (psi)</u> 7 (1) 7 (3) 83 (12)
Thermal Stability	ASTM D3575, Suffix S ISO 2796		< 1 % < 2 %
Thermal Conductivity @ 24°C (75°F) @ -5°C (23°F)	ASTM D3575, Suffix V; EN 28301; ISO 2581	Vertical	<u>W/mºK (BTU-in/hr-ft<sup>2</sup>-ºF)</u> 0.06 (0.42) 0.05 (0.37)
Water Absorption	ASTM D3575, Suffix L		<u>kg/m<sup>2</sup> (lb/ft<sup>2</sup>)</u> < 5 (0.1)
	ISO 2896; ASTM C0272		< 1% vol
Buoyancy	ASTM D3575, Suffix AA		<u>kg/m³ (pcf)</u> 929 (58)
Tensile Strength @ peak	ASTM D3575, Suffix T; ISO 1798	Average	<u>kPa (psi)</u> 310 (45)
Tensile Elongation	ASTM D3575, Suffix T; ISO 1798	Average	85 %
Tear Strength	ASTM D3575, Suffix G	Average	<u>N/mm (lb/in)</u> 2.1 (45)

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

- See reverse side for additional properties and product information.

#### **Product Features**

ETHAFOAM 221 A/S polyethylene foam is a resilient, durable, lightweight, flexible, solid extruded foam that has been tested by SP -Swedish National Testing and **Research Institute** Electrotechnics/Electronics - and has received the ESD Approval Certificate as class A and B material. ETHAFOAM 221 meets or exceeds the requirements for CID A-A 59135 - Class 1 - Grade B. As the properties listed on reverse suggest, ETHAFOAM 221 polyethylene foam offers excellent strength, resistance to creep under load, vibration and shock absorbency and water resistance characteristics.

ETHAFOAM 221 A/S polyethylene foam is produced with Dow's patented *RapidRelease*  manufacturing process. This new process technology incorporates a patented CFC- and HCFC-free blowing agent system and an accelerated curing system that reduces residual blowing agents in ETHAFOAM brand polyethylene foam products to trace amounts.

ETHAFOAM 221 A/S polyethylene foam is easily fabricated, impervious to most chemicals, nonabrasive and performs consistently over a wide range of temperatures. ETHAFOAM sheet polyethylene foam is also reusable and recyclable because it is made out of non-crosslinked polyethylene.

#### Flammability

ETHAFOAM 221 A/S polyethylene foam has successfully passed FMVSS 302 flammability conducted according to the U.S. Code of Federal Regulations, CFR 49.

#### CAUTION:

ETHAFOAM 221 A/S polyethylene foam plank is combustible and should not be exposed to flame or other ignition sources.

## For Additional Information or Technical Support

For information on products, design assistance and testing services available from Dow, in North America call 1-800-441-4369; in Europe call +49-7227-91-4101.

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