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ARPAK®
Expanded Polyethylene (EPE) Bead Foam

Material Physical Properties for Low Density Polyethylene Packaging Grade Foam Molded from ARPAK® Expanded Polyethylene (EPE) Beads

PHYSICAL PROPERTY	TEST METHOD	UNITS	TYPICAL VALUES		
Density	ASTM-D3575	pcf (g/l)	1.3 (20)	1.5 (24)	1.9 (30)
Compressive Strength					
@25% Strain	ASTM-D3575	psi	9.5	10.5	12.5
@50% Strain		psi	17.5	19.0	22.0
@75% Strain		psi	44.0	49.0	56.0
Compressive Set	ASTM-D3575	25% (50%)	3.0 (14.0)	4.2 (12.5)	4.8 (12.0)
Tensile Strength	ASTM-D3575	psi	39.2	44.7	51.4
Tensile Elongation	ASTM-D3575	%	32.0	30.0	28.5
Tear Strength	ASTM-D3575	lbs/in	14.0	15.5	17.0
Buoyancy	ASTM-D3575	pcf	60.6	60.2	59.5
Compressive Creep	ASTM-D3575 1000 hrs @ 1 psi	%	2.8	3.0	3.3
Thermal Conductivity	ASTM-C177	(K) BTU-in/ft^2-hr-°F	0.26	0.25	0.24
Thermal Resistance	ASTM-C177	(R)	3.9	4.0	4.2
Flammability	FMVSS-302	< 4.0 in/min.	Pass	Pass	Pass
Chemical Resistance (Auto fuels, fluids, solvents)	Various	1 hr exposure	Pass	Pass	Pass

Note: Typical values shown.
pcf = pounds/cubic foot, g/l = grams per liter

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