

Material Physical Properties for Low Density Cross-linked Expanded Polyethylene Foam Molded from ARPEX[®] Cross-linked Expanded Polyethylene (xEPE) Beads

PHYSICAL PROPERTY	TEST METHOD	UNITS	ARPEX [®] xEPE	ARPEX [®] xEPE	ARPEX [®] xEPE
Density	ASTM-D3575	pcf (g/l)	1.5 (24)	2.2 (35)	3.7 (60)
Compressive Strength @25% Strain	ASTM-D3575	psi	5.1	10.0	16.7
@50% Strain		psi	13.9	19.2	29.8
@75% Strain		psi	39.2	49.8	76.8
Compressive Set (25%)	ASTM-D3575	%	1.8	2.0	2.8
Tensile Strength	ASTM-D3575	psi	21.3	45.5	87.0
Tensile Elongation	ASTM-D3575	%	45.0	55.0	70.0
Tear Strength	ASTM-D3575	lbs/in	11.5	13.0	17.0
Buoyancy	ASTM-D3575	pcf	61.0	60.0	57.5
Compressive Creep	ASTM-D3575 1000 hrs @ 1 psi	%	4.0	2.1	1.8
Thermal Conductivity	ASTM-C177	(K) BTU-in/ft ² -hr-°F	0.25	0.24	0.25
Thermal Resistance	ASTM-C177	(R)	4.0	4.2	4.0
Flammability	FMVSS-302	< 4.0 in/min.	Pass	Pass	Pass
Chemical Resistance (Auto fuel, fluids, solvents)	Various	1 hr exposure	Pass	Pass	Pass

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