Rapid Die Cut

1.3# - 4.6# Expanded Polyethylene (EPE)

TECHNICAL DATA SHEET | BUNS (EFFECTIVE 24FEB25)

Expanded Polyethylene (EPE)

PHYSICAL PROPERTY	TEST METHOD	UNIT	JSP ARPAK® EPE					
Cell Structure	–	–	Closed					
Density (Grade)	ASTM D3575	pcf	1.3	1.5	1.9	2.3	2.8	4.6
Density	ASTM D3575	g/l	20	24	30	37	45	74
Compressive Strength@10%	ASTM D3575	psi	6.5	8.0	10.2	13.2	16.8	35
Compressive Strength@25%		psi	8.8	10.3	12.8	16.5	20.7	43
Compressive Strength@50%		psi	16.6	18.4	22.0	27.6	33.5	70
Compressive Strength@75%		psi	42.5	47.6	55.6	64.3	75.4	130
Tensile Strength	ASTM D3575	psi	40	45	52	62	70	120
Tensile Elongation	ASTM D3575	%	38	35	32	31	30	22
Tear Strength	ASTM D3575	lbs/in	14	16	17	19	21	34
Compressive Set @ 25%	ASTM D3575	%	3	4	4	4	4	7
Compressive Set @ 50%	ASTM D3575	%	14	13	12	12	12	15
Buoyancy	ASTM D3575	lbs/ft^3	60.6	59.5	59.5	59.3	59.1	56.5
Thermal Conductivity	ASTM C177	(K)BTU-in/ ft^2-hr-°F	0.26	0.24	0.24	0.24	0.24	0.30
Thermal Resistance	ASTM C177	(R) @ 70°F	4.0	4.2	4.2	4.2	4.1	3.3
Coeff. of Lin. Thermal Expansion	ASTM D696	in/in/°F x 10^{-5}	8.2	7.2	6.2	5.5	4.8	4.0
Service Temperature	ASTM D3575	°F (Max.)	160					
Water Absorption	ASTM D3575/C272	% (vol) / lb/ft^2	<5.0/< 0.02					
Compressive Creep	ASTM D3575	1000hr, % (psi)	2.8 (1)	3.0 (1)	3.3 (1)	3.5 (1.5)	3.0 (1.5)	4.0 (10)
Flammability	FMVSS 302	<4.0 in/min	Pass					
Chemical Resistance	Various	1 hr exposure (solvents, acids, and alkalines)	Pass					
Fuel Immersion	Coast Guard; Fuel B per 33 CFR §183.114	<5% (chg in vol)	Pass	Pass	Pass	Pass	Pass	N/A