



## Material Physical Property Information for ARPLANK® Products

### ARPRO® Expanded Polypropylene (EPP) – Density Range 1.3 pcf to 3.7 pcf (20 to 60 g/l)

Physical Properties†	Test Method	Units	JSP ARPRO® EPP			
Density (Grade)	ASTM-D3575	pcf	1.3	1.9	2.8	3.7
Density	ASTM-D3575	g/l	20	30	45	60
Compressive Strength @ 10%	ASTM-D3575	psi	9	15	29	40
Compressive Strength @ 25%		psi	12	19	35	52
Compressive Strength @ 50%		psi	21	29	48	70
Compressive Strength @ 75%		psi	42	60	105	147
Tensile Strength	ASTM-D3575	psi	37	54	68	85
Tensile Elongation	ASTM-D3575	%	29	26	21	18
Tear Strength	ASTM-D3575	lbf/in	13	15	20	23
Compressive Set @ 25%	ASTM-D3575	%	11	9	9	8
Compressive Set @ 50%	ASTM D3575	%	21	20	19	18
Buoyancy	ASTM-D3575	lbs/ft³	61	60	59	57
Thermal Conductivity	ASTM-C177	(K) BTU-in/ft²-hr-°F	0.25	0.24	0.26	0.26
Thermal Resistance	ASTM-C177	(R) @70°F	4.0	4.1	3.8	3.8
Coeff. of Lin. Thermal Expansion	ASTM-D696	in/in/°F x 10 <sup>-5</sup>	6.0	5.7	5.4	4.8
Service Temperature	ASTM-D3575	°F (Max.)	212	212	212	212
Water Absorption	ASTM-D3575/C272	% (vol) / lb/ft²	<5.0/<0.02	<5.0/< 0.02	<5.0/< 0.02	<5.0/< 0.02
Compressive Creep	ASTM-D3575	1000hr, % (psi)	2.0 (1.5)	1.2 (2.0)	1.5 (3.0)	1.5 (6.0)
Flammability	FMVSS-302	<4.0 in/min	Pass	Pass	Pass	Pass
Chemical Resistance	Various	1 hr exposure (solvents, acids, and alkalines)	Pass	Pass	Pass	Pass
Fuel Immersion	Coast Guard; Fuel B per 33 CFR §183.114	<5% (chg in vol)	Pass	Pass	Pass	Pass

†Note: For standard JSP ARPLANK EPP Products. Values shown are typical of the product and should not be construed as specification limits. (NA = Not Available)