

**Material Physical Properties
for Foam (density range from 20 g/l to 90 g/l)
Molded from ARPRO[®] Expanded Polypropylene (EPP) Beads**

PHYSICAL PROPERTY	TEST METHOD	UNITS	TEST RESULTS						
			20	30	45	60	67	82	90
Density	ASTM-D3575	grams/liter	20	30	45	60	67	82	90
Compressive Strength @25% Strain @50% Strain @75% Strain	ASTM-D3575	MPa	0.10 0.16 0.31	0.16 0.23 0.44	0.28 0.37 0.76	0.39 0.50 1.07	0.45 0.59 1.26	0.60 0.80 1.78	0.69 0.93 2.08
Compression Set	ASTM-D3575	%	14	12	12	11	11	10	10
Tensile Strength	ASTM-D3575	MPa	0.26	0.38	0.46	0.62	0.71	0.87	0.97
Tensile Elongation	ASTM-D3575	%	15	15	14	14	13	13	12
Tear Strength	ASTM-D3575	KN/m	1.74	2.13	2.73	3.25	3.51	4.07	4.35
Flexural Strength	ASTM-D790	MPa	.21	.38	.54	.72	.86	1.08	1.16
Flexural Modulus		MPa	9.8	11.6	14.5	19.0	22.2	28.9	31.1
Coefficient of Linear Thermal Expansion 20°C to -40°C 20°C to 80°C	ASTM-D696	mm/mm/°C x 10 ⁻⁵	6.8 10.8	5.9 10.2	5.5 9.8	4.3 8.7	4.1 7.9	3.9 7.5	3.7 6.8
Water Absorption	ASTM-C272	gms/cc x 10 ⁻³	10.4	8.1	6.2	5.1	4.5	4.2	3.5
Flammability	FMVSS 302	< 100 mm/min.	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Chemical Resistance (Auto fuels, fluids, solvents)	Various	1 hr exposure	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Note: Data for JSP International ARPRO[®] White Material (7000 Series) and Black Material (5000 Series).
Typical Values Shown.