



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

PHYSICAL PROPERTY	TEST METHOD	UNITS	TEST RESULTS						
Density	ASTM-D3575	grams/liter	20	30	45	60	67	82	90
Compressive Strength	ASTM-D3575	MPa							
@25% Strain			0.09	0.15	0.26	0.39	0.44	0.60	0.65
@50% Strain			0.16	0.22	0.36	0.53	0.58	0.80	0.88
@75% Strain			0.31	0.44	0.74	1.07	1.26	1.80	2.02
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	%	18	16	15	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	ASTM-D790	MPa	9.8	11.6	14.5	19.0	22.2	28.9	31.1
Coefficient of Linear Thermal Expansion	ASTM-D696/ TMA	mm/mm/°C x 10 ⁻⁵							
20°C to -40°C			6.8	5.9	5.5	4.3	4.1	3.9	3.7
20°C to 80°C			10.8	10.2	9.8	8.7	7.9	7.5	6.8
Water Absorption	ASTM-C272	g/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 ARPRO® White (30XX/72XX Series) and Black (50XX/54XX Series) Standard Grade Materials
 Typical values shown and should not be construed as specification limits.

