



Material Physical Properties; 1.15 to 4.2 pcf (18 to 67 g/l)
 for Low Utility Grade ARPRO® Expanded Polypropylene (LU-EPP)

PHYSICAL PROPERTY	TEST METHOD	UNITS	RESULTS									
			1.15	1.3	1.5	1.9	2.3	2.8	3.3	3.75	4.2	
Density	ASTM-D3575	pcf (lb/ft ³)	1.15	1.3	1.5	1.9	2.3	2.8	3.3	3.75	4.2	
Compressive Strength	ASTM-D3575	psi	10	11	13.5	18	24	31	37	42	50	
@25% Strain			18	20	23	28	36	44	53	61	67	
@50% Strain			39	41	49	59	79	100	117	134	160	
Compression Set	ASTM-D3575	%	12	12	11	10	10	10	10	9	9	
25%			23	22	22	21	21	20	20	20	20	19
50%												
Tensile Strength	ASTM-D3575	psi	31	33	39	48	54	60	68	75	90	
Tensile Elongation	ASTM-D3575	%	30	28	27	25	23	20	18	17	16	
Tear Strength	ASTM-D3575	lbf/in	10	11	12	13	15	17	18	20	22	
Flexural Strength	ASTM-D790	psi	22	24	32	43	52	61	73	83	98	
Coefficient of Linear Thermal Expansion	ASTM-D696	in/in/°F x 10 ⁻⁵	3.9	3.8	3.6	3.3	3.2	3.1	2.7	2.4	2.3	
68°F to -40°F			6.2	6.1	6.0	5.8	5.7	5.6	5.2	5.0	4.5	
68°F to 176°F												
Water Absorption	ASTM D2842/ ASTM-C272	% / lb/in ³ x 10 ⁻²	<5.0/6.2	<5.0/6.0	<5.0/5.8	<5.0/5.6	<4.5/5.3	<4.0/5.0	<3.5/4.5	<3.0/4.2	<3.0/3.8	
Flammability	FMVSS-302	< 4 in/min	Pass									
Chemical Resistance (Auto fuels, fluids, solvents)	Various	1 hr exposure	Pass									

Notes: Data for JSP ARPRO® 53XX (Black) & 33XX (White) Series Materials. While values shown are typical of the product, they should not be construed as specification limits. 20 g/l = 1.3 pcf = 45X (g/l = grams per liter; pcf = pounds per cubic foot; X = foam expansion ratio).

ARPRO® LU-EPP 53XX/33XX Series is a more resilient EPP product. While it is slightly less stiff vs. standard ARPRO® EPP, it produces a more flexible molded product with improved tensile elongation and tear strength. It can be molded using reduced utilities (lower steam pressures – less energy) vs. standard ARPRO EPP. Reduced utilities allow for the possibility of faster cycle times and faster processing times. This product is recommended for applications such as fabricated Plank and lower density EPP parts that require improved flexibility, resiliency, and tensile elongation properties.

