

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 | | | | | | |
|--|-------------|-----------------------------|--------------|-------|-------|-------|-------|-------|-------|
| | | | | | | | | | |
| Density | ASTM-D3575 | pcf (lb/ft ³) | 1.3 | 1.9 | 2.8 | 3.7 | 4.2 | 5.1 | 5.6 |
| Compressive Strength @25% Strain | ASTM-D3575 | psi (lb/ft ²) | 15 | 23 | 41 | 57 | 65 | 87 | 100 |
| @50% Strain | | | 23 | 33 | 54 | 73 | 86 | 116 | 135 |
| @75% Strain | | | 45 | 64 | 110 | 155 | 183 | 258 | 302 |
| Compression Set | ASTM-D3575 | % | 10 | 10 | 11 | 11 | 12 | 12 | 12 |
| Tensile Strength | ASTM-D3575 | psi (lb/ft ²) | 38 | 55 | 67 | 90 | 103 | 126 | 141 |
| Tensile Elongation | ASTM-D3575 | % | 15 | 15 | 14 | 14 | 13 | 13 | 12 |
| Tear Strength | ASTM-D3575 | lbf/in | 10 | 12 | 16 | 19 | 20 | 23 | 25 |
| Flexural Strength | ASTM-D790 | psi (lb/ft ²) | 30 | 55 | 78 | 104 | 125 | 157 | 168 |
| Flexural Modulus | ASTM-D790 | psi (lb/ft ²) | 1,421 | 1,682 | 2,103 | 2,756 | 3,220 | 4,192 | 4,511 |
| Coefficient of Linear Thermal Expansion 20°C to -40°C | ASTM-D696 | in/in/°F x 10 ⁻⁵ | 3.8 | 3.3 | 3.1 | 2.4 | 2.3 | 2.2 | 2.1 |
| 20°C to 80°C | | | 6.0 | 5.7 | 5.4 | 4.8 | 4.4 | 4.2 | 3.8 |
| Water Absorption | ASTM-C272 | % | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Flammability | FMVSS 302 | < 4.0 inches/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 ARPRO[®] White Material (7000 Series) and Black Material (5000 Series).
Typical Values Shown.