

PVC HT (High Temperature) is a closed-cell, cross-linked polymer PVC foam formulated for resistance to high temperatures, durability, rigidity and strength. It is compatible with multiple resins and adhesives.

It has a very low water absorption rate and excellent chemical resistance. Ideal for many lightweight composite applications that will be exposed to high temperatures.

PROCESSING

- Hand lamination / spray lay-up
- Vacuum infusion
- Resin injection
- Adhesive bonding
- Pre-preg processing (up to 140 °C, 285 °F)
- Thermoforming



APPLICATIONS

Marine: hulls, decking, bulkheads, interiors superstructures

Transportation: floors, ceilings, doors, interiors, partition walls, sidewalls

Wind energy: rotor blades, covers, casings

Aerospace: fuselage and wind components, kitchen trolleys, galleys

Industrial: Covers, Containers, Tanks, Sporting goods, Tooling and Molds



Mechanical Properties for PVC HT

| TEST STANDARDS | | Units (Imperial) | 60 | 80 |
|-------------------------------|---------------|-------------------------------|--------------|--------------|
| Density | ASTM D1622 | Lbs. / cu.ft | 3.75 | 5 |
| Compressive Strength | ASTM D1621-10 | psi | 131 | 212 |
| Compressive Modulus | ASTM D1621-10 | psi | 6382 | 9282 |
| Tensile Strength | ASTM D1623 | psi | 290 | 406 |
| Tensile Modulus | ASTM D1623 | psi | 14649 | 20595 |
| Shear Strength | ASTM C273 | psi | 113 | 168 |
| Shear Modulus | ASTM C273 | psi | 2901 | 4351 |
| Shear elongation at break | ASTM C273 | % | 27 | 27 |
| Thermal conductivity at 75 °F | ASTM C-177 | BTU.in/ft ² .hr.°F | 0.21 | 0.25 |
| Standard Sheet (Plain) | Length | inch | 94.49 | 84.65 |
| | Width | inch | 44.10 | 39.57 |
| | Thickness | inch | 1/8 to 2 3/4 | 1/8 to 2 3/4 |

Values shown are nominal average determined from independent laboratory and house testing. Tests are perpendicular to the plane.

| Color: | Yellow | Pink |
|-------------------------|-----------|------|
| Density Tolerance: | + / - 10% | |
| Water absorption | < 1% | |
| Processing temperature: | 285 °F | |

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Mechanical Properties for PVC HT

| TEST STANDARDS | | Units (metric) | 60 | 80 |
|-------------------------------|---------------|----------------------|---------|---------|
| Density | ASTM D1622 | Kg. / m ³ | 60 | 80 |
| Compressive Strength | ASTM D1621-10 | MPa | 0,90 | 1,46 |
| Compressive Modulus | ASTM D1621-10 | MPa | 44 | 64 |
| Tensile Strength | ASTM D1623 | MPa | 2,00 | 2,80 |
| Tensile Modulus | ASTM D1623 | MPa | 101 | 142 |
| Shear Strength | ASTM C273 | MPa | 0,78 | 1,16 |
| Shear Modulus | ASTM C273 | MPa | 20 | 30 |
| Shear elongation at break | ASTM C273 | % | 27 | 27 |
| Thermal conductivity at 24 °C | ASTM C-177 | W/m.K | 0,031 | 0,036 |
| Standard Sheet (Plain) | Length | mm | 2400 | 2150 |
| | Width | mm | 1120 | 1005 |
| | Thickness | mm | 3 to 78 | 3 to 75 |

Values shown are nominal average determined from independent laboratory and house testing. Tests are perpendicular to the plane.

| Color: | Yellow | Pink |
|-------------------------|-----------|------|
| Density Tolerance: | + / - 10% | |
| Water absorption | < 1% | |
| Processing temperature: | 140 °C | |