

CoreLite® PVC

Product Data Sheet

Last Revised: December 14, 2015

CoreLite® PVC is a closed-cell, cross-linked polymer PVC foam formulated for durability, strength, and high processing temperatures. 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.

PROCESSING

- Hand lamination / spray lay-up
- Vacuum infusion
- Resin injection
- Adhesive bonding
- Pre-preg processing (up to 80 °C, 176 °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

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CoreLite® PVC

MECHANICAL PROPERTIES - Imperial					
TEST STANDARDS	UNITS	48	60	80	100
Density per ASTM D1622	Lbs/ft ³	3	3.75	5	6.24
Compressive Strength per ASTM D1621-10	psi	100.08	139.24	207	280
Compressive Modulus per ASTM D1621-10	psi	4786.25	6671.74	9862	13053
Tensile Strength per ASTM D1623	psi	137.79	306.02	377	447
Tensile Modulus per ASTM D1623	psi	12618.3	15374	19870	24511
Shear Strength per ASTM C273	psi	79.77	111.68	164	216
Shear Modulus per ASTM C273	psi	2320.6	3045.79	4206	5366
Shear elongation at break per ASTM C273	%	9	13	20	25
Thermal conductivity at room temperature	BTU.in/ft ² .hr.°F	0.21	0.21	0.23	0.24
Standard Sheet dimensions	inch	50 x 107.48	45.27 x 96.45	40.16 x 85.83	37.40 x 80.71
Thickness	inch	1/4 to 2 3/4	1/4 to 2 3/4	1/4 to 2 3/4	1/4 to 2 1/2

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

Color:	Purple	Yellow	Green	Pink
Density Tolerance:	+ / - 10%			

Disclaimer: The information and data presented herein are subject to revision. CoreLite Inc. reserves the right to release replacement data. The data presented is derived from in house and independent testing. Calculations should be verified with physical test. The data is provided without liability to CoreLite, Inc. or its agents and does not constitute warranty or representation in respect to the material or its use.

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MECHANICAL PROPERTIES - Metric					
TEST STANDARDS	UNITS	48	60	80	100
Density per ASTM D1622	Kg/m ³	48	60	80	100
Compressive Strength per ASTM D1621-10	MPa	0,69	0,96	1,43	1,93
Compressive Modulus per ASTM D1621-10	MPa	33	0,46	68	90
Tensile Strength per ASTM D1623	MPa	0,95	2,11	2,60	3,08
Tensile Modulus per ASTM D1623	MPa	87	106	137	169
Shear Strength per ASTM C273	MPa	0,55	0,77	1,13	1,49
Shear Modulus per ASTM C273	MPa	16	21	29	37
Shear elongation at break per ASTM C273	%	9	13	20	25
Thermal conductivity at room temperature	W/m.K	0.031	0.031	0.033	0.035
Standard Sheet dimensions	mm	1270 x 2730	1150 x 2450	1020 x 2180	950 x 2050
Thickness	mm	5 to 70	5 to 70	5 to 72	5 to 68

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

Color:	Purple	Yellow	Green	Pink
Density Tolerance:	+ / - 10%			

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