

# CoreLite® PVC R

## Product Data Sheet

Last Revised: April 25, 2016

CoreLite® PVC R is a closed-cell, cross-linked polymer PVC foam formulated for durability, strength, and high processing temperatures. It consists of multiple PVC foam strips fused together, in an effort to recycle the foam strips. It is compatible with multiple resins and adhesives.

This product is self-extinguishing when in contact with fire.

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:** nacelles, decking, interiors superstructures

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

**Wind energy:** rotor blades, nacelles, covers, casings

**Aerospace:** kitchen trolleys, galleys

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



**USA - Florida**  
1060 E. 30 St.  
Miami, FL 33013, USA  
T +1 (305) 921-4292  
F +1 (305) 691-9094

**USA - Texas**  
5101 Norwood Road  
Dallas, TX 75247, USA  
T +1 (214) 905-4359  
F +1 (214) 905-4365

**Ecuador**  
Km. 24 Via Daule  
Guayaquil, Ecuador  
T +593 4-226-7008  
F +593 4-226-7007

**Europe**  
Via Enrico Fermi, ZA1  
46011 – Acquanegra s/C (MN), Italy  
T +39 3398 107391  
F +39 0376 727248

# CoreLite® PVC R

## Mechanical Properties for CoreLite® PVC R

TEST STANDARDS		Units (Imperial)	40	60	80	100	130
Density	ASTM D1622	Lbs. / cu.ft	3	3.75	5	6.24	8.12
Compressive Strength	ASTM D1621-10	psi	100	139	207	280	396
Compressive Modulus	ASTM D1621-10	psi	4786	6672	9862	13053	18130
Tensile Strength	ASTM D1623	psi	102	167	264	312	442
Tensile Modulus	ASTM D1623	psi	2031	5076	7687	10878	13198
Shear Strength	ASTM C273	psi	80	112	164	216	294
Shear Modulus	ASTM C273	psi	2321	3046	4206	5366	7107
Shear elongation at break	ASTM C273	%	9	13	20	25	32
Thermal conductivity at 75 °F	ASTM C-177	BTU.in/ft <sup>2</sup> .hr.°F	0.21	0.21	0.23	0.24	0.27
Standard Sheet (Plain)	Length	inch	107.48	96.45	85.83	80.71	74.80
	Width	inch	50	45.27	40.16	37.40	33.47
	Thickness	inch	1/8 to 2 3/4	1/8 to 2 3/4	1/8 to 2 3/4	1/8 to 2 1/2	1/8 to 2

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

Color:	Light Blue	Yellow	Green	Pink	Blue
Density Tolerance:	+ / - 10%				
Water absorption	< 1%				
Processing temperature:	176 °F				

**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.

**USA - Florida**  
1060 E. 30 St.  
Miami, FL 33013, USA  
T +1 (305) 921-4292  
F +1 (305) 691-9094

**USA - Texas**  
5101 Norwood Road  
Dallas, TX 75247, USA  
T +1 (214) 905-4359  
F +1 (214) 905-4365

**Ecuador**  
Km. 24 Via Daule  
Guayaquil, Ecuador  
T +593 4-226-7008  
F +593 4-226-7007

**Europe**  
Via Enrico Fermi, ZAI  
46011 – Acquaneira s/C (MN), Italy  
T +39 3398 107391  
F +39 0376 727248

# CoreLite® PVC R

## Mechanical Properties for CoreLite® PVC R

TEST STANDARDS		Units (metric)	40	60	80	100	130
Density	ASTM D1622	Kg. / m <sup>3</sup>	40	60	80	100	130
Compressive Strength	ASTM D1621-10	MPa	0,59	0,96	1,43	1,93	2,73
Compressive Modulus	ASTM D1621-10	MPa	23	46	68	90	125
Tensile Strength	ASTM D1623	MPa	0,70	1,15	1,82	2,15	3,05
Tensile Modulus	ASTM D1623	MPa	14	35	53	75	91
Shear Strength	ASTM C273	MPa	0,55	0,77	1,13	1,49	2,03
Shear Modulus	ASTM C273	MPa	16	21	29	37	49
Shear elongation at break	ASTM C273	%	9	13	20	25	32
Thermal conductivity at 24 °C	ASTM C-177	W/m.K	0.031	0.031	0.033	0.035	0.039
Standard Sheet (Plain)	Length	mm	2730	2450	2180	2050	1900
	Width	mm	1270	1150	1020	950	850
	Thickness	mm	3 to 70	3 to 70	3 to 70	3 to 64	3 to 51

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

Color:	Light Blue	Yellow	Green	Pink	Blue
Density Tolerance:	+ / - 10%				
Water absorption	< 1%				
Processing temperature:	80 °C				

**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.

**USA - Florida**  
1060 E. 30 St.  
Miami, FL 33013, USA  
T +1 (305) 921-4292  
F +1 (305) 691-9094

**USA - Texas**  
5101 Norwood Road  
Dallas, TX 75247, USA  
T +1 (214) 905-4359  
F +1 (214) 905-4365

**Ecuador**  
Km. 24 Via Daule  
Guayaquil, Ecuador  
T +593 4-226-7008  
F +593 4-226-7007

**Europe**  
Via Enrico Fermi, ZAI  
46011 – Acquanegra s/C (MN), Italy  
T +39 3398 107391  
F +39 0376 727248

Driven by innovation,  
inspired by **possibilities**,  
powered by **nature**,  
built for **you**,  
we are proud to make the most  
**sustainable** core material on earth.

Learn more



imagine.  
create.  
enjoy.

**USA - Florida**  
1060 E. 30 St.  
Miami, FL 33013, USA  
T +1 (305) 921-4292  
F +1 (305) 691-9094

**USA - Texas**  
5101 Norwood Road  
Dallas, TX 75247, USA  
T +1 (214) 905-4359  
F +1 (214) 905-4365

**Ecuador**  
Km. 24 Via Daule  
Guayaquil, Ecuador  
T +593 4-226-7008  
F +593 4-226-7007

**Europe**  
Via Enrico Fermi, ZA1  
46011 – Acquanegra s/C (MN), Italy  
T +39 3398 107391  
F +39 0376 727248