

BALSASUD® Core Standard Grade (SG) – Scheda Tecnica Prodotto

I pannelli BALSASUD® sono i migliori materiali d'anima in legno di balsa end-grain presenti sul mercato, ideali per la realizzazione di sandwich in composito. BALSASUD® possiede importanti proprietà meccaniche, a partire dall'eccezionale rapporto resistenza-peso (elevata resistenza al taglio ed a compressione). E' un materiale naturale nonché una risorsa rinnovabile, proveniente dalle foreste dell'Ecuador. Possiede inoltre importanti proprietà di resistenza a fatica e ad urti, oltre a fornire un considerevole isolamento acustico e termico. Infine, è un materiale resistente al fuoco.

- Eccezionale rapporto resistenza-peso
- Elevata resistenza chimica (incluso lo stirene)
- Risorsa totalmente organica, sostenibile e rinnovabile

LAVORAZIONI

- Lavorazioni con Prepreg (fino a 180 °C o 355 °F)
- Lavorazioni per infusione/iniezione (VARTM / RTM)
- Incollaggio con bonder
- Infusione sottovuoto
- Lavorazione manuale e spray
- Lavorazione a pressa (GMT, SMC)

APPLICAZIONI

Nautica: scafo, coperta, sovrastrutture, paratie, punti di fissaggio, interni, supporti motore, pavimenti, stampi, longheroni

Eolico: pale eoliche, navicelle

Aeronautica: strutture aeree, pannelli per pavimentazioni, pannelli strutturali, container air cargo, partizioni interiori e veicoli aerei senza equipaggio (UAV)

Trasporti: strutture del corpo centrale, strutture interne, pareti laterali, pavimenti, soffitti e pannelli

Difesa: navi da guerra e deckhouses, strutture a pannelli, cargo pallets, containers, strutture aeree, strutture protettive e veicoli aerei senza equipaggio (UAV)

Industriale: vasche e docce, utensili, serbatoi industriali, ripari, pannelli per edilizia (insonorizzanti, isolanti e decorativi)

Equipaggiamento Sportivo: tavole da surf, snowboards, sci

5101 Norwood Road
Dallas, TX 75247
United States

Contact CoreLite, Inc.

T +1 (214) 905-4359
F +1 (214) 905-4365
Email: info@corelitecomposites.com

Dallas • Miami • Ecuador

www.corelitecomposites.com

CoreLite®

Mechanical Properties for BALSASUD® Core				
TEST STANDARDS	Units (Metric)	Ultra Lite (UL)	Standard Grade (SG)	Heavy Weight (HW)
Density per ASTM C-271	Kg. / M3	100	152,18	280
Compressive Strength per ASTM C-365	MPa	6,53	10,67	21,62
Compressive Modulus per ASTM C-365	MPa	2036	2349,2	4385.00
Tensile Strength per ASTM C-297	MPa	7,50	14,39	18,05
Tensile Modulus per ASTM C-297	MPa	2238	3574	5692
Shear Strength per ASTM C-273	MPa	1,88	2,72	5,57
Shear Modulus per ASTM C-273	MPa	110	186,19	364
Thermal Conductivity at 24°C per ASTM C-177	W/m*K	0,048	0,066	0,084
Sheet Length	mm	1220	1220	1220
Sheet Width	mm	610	610	610
Sheet Thickness	mm	from 6,35 to 76,20	from 6,35 to 76,20	from 6,35 to 76,20

Nominal value is an average value of a mechanical property at a nominal density. Tests are perpendicular to the plane.

Continuous operating temperature range:	-212° C to +163° C
Moisture content:	from 6% to 12%
Density Tolerance:	+ / - 10%

Disclaimer: The information provided in this Data Sheet has been obtained through different tests and experience. The values provided are approximate and should be treated as such. The information is believed to be correct. However, there is no warranty, either expressed or implied, regarding the precision of results obtained by using such information. The company shares no liability for its misuse. BALSASUD® Core SG is approved by DNV GL and Lloyd's Register.

USA - Florida
1060 E. 30 St.
Miami, FL 33013, USA
T +1 (305) 691-9093
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 4-226-7084
F +593 4-226-7007

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

Mechanical Properties for BALSASUD® Core

TEST STANDARDS	Units (Imperial)	Ultra Lite (UL)	Standard Grade (SG)	Heavy Weight (HW)
Density per ASTM C-271	Lbs. / cu.ft	6.5	9.5	17.5
Compressive Strength per ASTM C-365	psi	947	1547.55	3136
Compressive Modulus per ASTM C-365	ksi	295.36	340.72	635.99
Tensile Strength per ASTM C-297	psi	1088	2087.09	2618
Tensile Modulus per ASTM C-297	ksi	324.68	518.36	825.55
Shear Strength per ASTM C-273	psi	272	394.50	808
Shear Modulus per ASTM C-273	ksi	15.84	27.01	52.79
Thermal Conductivity at 24°C per ASTM C-177	BTU.in/ft ² .hr.°F	0.331	0.460	0.581
Sheet Length	inches	48	48	48
Sheet Width	inches	24	24	24
Sheet Thickness	inches	from 1/4 to 3	from 1/4 to 3	from 1/4 to 3

Nominal value is an average value of a mechanical property at a nominal density. Tests are perpendicular to the plane.

Continuous operating temperature range:	-349.6° F to +325.4° F
Moisture content:	from 6% to 12%
Density Tolerance:	+ / - 10%

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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.
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