


Spaulding
 COMPOSITES INC

ENGINEERING DATA SHEET
GRADE: SPAULDITE® LF-1127 LAMINATE SHEET

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Spauldite® Grade LF-1127 is a fabric base laminate developed especially for use as rotor vanes in air motors. The proprietary resin system contains a special lubricant designed to improve vane life and reduce the need for external lubricants, such as oil. The life of Spauldite® LF-1127 vanes in air motors where lubricants are used is considerably longer than conventional vane laminates and LF-1127 has performed without lubrication in some applications. This laminate retains most of the advantages (e.g. dimensional stability) of other Spauldite® vane materials plus it has the special lubricant as an added feature. Since air motor applications and conditions vary widely, customers are encouraged to evaluate LF-1127 in their specific application.

MAJOR FEATURES

- Little or No Lubrication Required
- Excellent Wear Resistance
- Good Dimensional Stability
- Available as Finished Vanes
- Light Weight
- Good Mechanical Strength

ELECTRIAL CHARACTERISTICS

Grade LF-1127 is not recommended for use as primary electrical insulation.

MECHANICAL CHARACTERISTICS

Grade LF-1127 demonstrates good flexural and impact strength. It is capable of maintaining dimensional stability in high moisture environments and has low water absorption.

APPLICATIONS

Grade LF-1127 is used primarily in small to medium size air motors. Grade LF-1127 is also used in portable air driven tools and air driven starter motors.

FABRICATION

Grade LF-1127 is sold as fabricated vanes only. Contact Customer Service for prototypes or sample vanes.

STANDARD SHEET SIZE¹: 48" X 36"
48" X 48"

COLOR: NATRAUL BROWN

THICKNESS: .032" –3.000"

¹ Available in fabricated parts only.

"To the best of our knowledge the information contained herein is accurate; however, Spaulding Composites Company, Inc. does not accept any liability regarding the accuracy or completeness of such information. Further, such information is based on standard base material and thus may change if the product ordered by purchaser requires further processing of base material by us and/or the purchaser. Purchaser has the sole responsibility in determining the suitability of any material described herein for the use contemplated and the processing of such material by purchaser."


PROPERTY CHARACTERISTICS

PROPERTY	ASTM TEST METHOD	CONDITIONING & TYPE OF TEST	THICKNESS INCHES	AVERAGE TYPICAL VALUES	
				ENGLISH	SI
MECHANICAL					
Bonding Strength	D-229	A Lengthwise Crosswise	.500	1,450 lbs	6.45 kN
			.500	1,450 lbs	6.45 kN
Compressive Strength (Flatwise)	D-229	A	.500	35.0 ksi	241.3 MPa
Flexural Strength Flatwise	D-229	A Lengthwise Crosswise	.125	21.2 ksi	(MPa) 146.2
			.125	16.7 ksi	115.1
Flexural Modulus Flatwise	D-229	A Lengthwise Crosswise	.125	1.09 msi	(MPa) 7500
			.125	.86 msi	5900
Izod Impact Edgewise Notched	D-229	A Lengthwise Crosswise	.125	2.2 ft-lbs/in	.117 J/mm
			.125	2.1 ft-lbs/in	.112 J/mm
Tensile Strength	D-229	A Lengthwise Crosswise	.125	16.2 ksi	MPa 111.7
			.125	11.0 ksi	75.8
PHYSICAL					
Density	D-792	A	.125	.051 lbs/in ³	1.41 g/cm ³
Rockwell Hardness	D-229	A	.500	M106	M106
Water Absorption	D-229	E-1/105+D1-24/23	.125	.95%	.95%

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