Spaulding COMPOSITES INC ENGINEERING DATA SHEET
GRADE: SPAULDITE® LF-1127 LAMINATE SHEET

Reprint of: 1297 **Issued:** 0613

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 SIZE[1]: 48” X 36” 48” X 48” COLOR: NATRAUL BROWN THICKNESS: .032” –3.000”

[1] Available in fabricated parts only.

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PROPERTY CHARACTERISTICS

PROPERTY	ASTM TEST METHOD	CONDITIONING & TYPE OF TEST	THICKNESS INCHES	AVERAGE TYPICAL VALUES	
				ENGLIGH	SI
MECHANICAL					
Bonding Strength	D-229	A Lengthwise Crosswise	.500 .500	1,450 lbs 1,450 lbs	6.45 kN 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 .125	21.2 ksi 16.7 ksi	(MPa) 146.2 115.1
Flexural Modulus Flatwise	D-229	A Lengthwise Crosswise	.125 .125	1.09 msi .86 msi	(MPa) 7500 5900
Izod Impact Edgewise Notched	D-229	A Lengthwise Crosswise	.125 .125	2.2 ft-lbs/in 2.1 ft-lbs/in	.117 J/mm .112 J/mm
Tensile Strength	D-229	A Lengthwise Crosswise	.125 .125	16.2 ksi 11.0 ksi	MPa 111.7 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%