



## LR1410 Ablative Prepreg

LR1410 is a composite produced from Lewcott PSR133G carbon filled MIL-R-9299 phenolic resin matrix on a five harness (5HS) PAN precursor carbon fabric. The material is designed to meet and/or exceed the thermal and insulation requirements of solid propulsion rockets.

### Chemical Properties of LR1410

Property	Value	Test Method
Resin Solids, %	31-37	QCP-R-5
Volatile, %	3-7	QCP-V-1
Laminar Flow @ 150 psi, %	10-20	QCP-F-1
Filler Content, %	8-15	QCP-R-5
Prepreg Width, in	48	

### Physical Properties of LR1410

Property	Value	Test Method
Specific Gravity	1.60	ASTM-D-792
Tensile Strength, psi	30,000	ASTM-D-638
Compression Strength, psi	30,000	ASTM-D-695
Thermal Conductivity (across ply), BTU/ ft.-hr.-°F	5.0	ASTM-C-177
Interlaminar Shear, psi	2,000	FMS406/1041
CTE (across ply)(80-400 °F), 10-6in./ in.°F	33.0	ASTM-D-696

### Molding Cycle

Press cured at 325° F using 1000 psi pressure for 2 hours.