

# DuPont™ Rynite® PET

thermoplastic polyester resin

## Rynite® FR530L BK507

Rynite® FR530L BK507 is a 30% glass reinforced, flame retardant, lubricated, black, modified polyethylene terephthalate resin recognized by UL as UL94V-0 at 0.35mm. It has an outstanding balance of properties, temperature index and flow characteristics.

Property	Test Method	Units	Value
<b>Identification</b>			
Resin Identification	ISO 1043		PET-GF30FR(17)
Part Marking Code	ISO 11469		>PET-GF30FR(17)<
<b>Mechanical</b>			
Stress at Break	ISO 527	MPa (kpsi)	133 (19.3)
Strain at Break	ISO 527	%	1.9
Tensile Modulus	ISO 527	MPa (kpsi)	11300 (1640)
Flexural Modulus	ISO 178	MPa (kpsi)	10500 (1520)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	9
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	40
<b>Thermal</b>			
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	252 (486)
<b>Electrical</b>			
CTI	UL 746A	V	250

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.

ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.

Test temperatures are 23°C unless otherwise stated.

Shrinkage generated per ISO 294-4 based on 60 X 60mm end-gated plaques or ASTM D 955 based on 76 X 127mm (3 X 5in) end-gated plaques.

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Property	Test Method	Units	Value
<b>Flammability</b>			
Flammability Classification 0.35mm	IEC 60695-11-10		V-0
Flammability Classification 0.35mm	UL94		V-0
5V Rating	IEC 60695-11-20		5VA
5V Rating	UL94		5VA
5V Min. Thickness Tested	IEC 60695-11-20	mm	1.5 (15)
5V Min. Thickness Tested	UL94	mm	1.5 (15)
Glow Wire Flammability Index 0.75mm	IEC 60695-2-12	°C	960
2.0mm			960
Glow Wire Ignition Temperature 0.75mm	IEC 60695-2-13	°C	800
1.5mm			800
2.0mm			985
High Amperage Arc Ignition Resistance 0.35mm	UL 746A	arcs	60
0.75mm			60
1.5mm			60
2.0mm			60
3.0mm			60
Hot Wire Ignition 0.35mm	UL 746A	s	17
0.75mm			30
1.5mm			120
2.0mm			120
3.0mm			120

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Property	Test Method	Units	Value
<b>Temperature Index</b>			
RTI, Electrical 0.35mm	UL 746B	°C	155
RTI, Impact 0.75mm	UL 746B	°C	155
RTI, Strength 0.75mm	UL 746B	°C	155
<b>Other</b>			
Density	ISO 1183	kg/m <sup>3</sup> (g/cm <sup>3</sup> )	1680 (1.68)
<b>Processing</b>			
Melt Temperature Range		°C (°F)	270-290 (520-555)
Melt Temperature Optimum		°C (°F)	280 (535)
Mold Temperature Range		°C (°F)	>95 (>205)
Mold Temperature Optimum		°C (°F)	110 (230)
Drying Time, Dehumidified Dryer		h	4
Drying Temperature		°C (°F)	120 (250)
Processing Moisture Content		%	<0.02

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