

# DuPont™ Rynite® PET

thermoplastic polyester resin

## Rynite® FR515 BK507

Rynite® FR515 BK507 is a flame retardant 15% glass reinforced modified polyethylene terephthalate. Recognized by UL as UL94V-0 at 0.8mm(0.03in). Has a 140C temp index. Excellent balance of electrical and mechanical prop. High temp. resistance and flow.

Property	Test Method	Units	Value
<b>Identification</b>			
Resin Identification	ISO 1043		PET-GF15FR(17)
Part Marking Code	ISO 11469		>PET-GF15FR(17)<
<b>Mechanical</b>			
Stress at Break	ISO 527	MPa (kpsi)	
-40°C (-40°F)			125 (18)
23°C (73°F)			100 (14)
Strain at Break	ISO 527	%	
-40°C (-40°F)			2.0
23°C (73°F)			2.2
Tensile Modulus	ISO 527	MPa (kpsi)	
-40°C (-40°F)			7721 (1119)
23°C (73°F)			6135 (888)
150°C (300°F)			3590 (520)

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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<b>Mechanical</b>			
Flexural Modulus	ISO 178	MPa (kpsi)	
-40°C (-40°F)			6737 (977)
23°C (73°F)			6000 (869)
Flexural Strength	ISO 178	MPa (kpsi)	
-40°C (-40°F)			180 (26)
23°C (73°F)			160 (23.2)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	
-40°C (-40°F)			6
23°C (73°F)			6.2
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	
-40°C (-40°F)			20
23°C (72°F)			32
<b>Thermal</b>			
Deflection Temperature	ISO 75-1/-2	°C (°F)	
0.45MPa			238 (460)
1.80MPa			200 (392)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			254 (489)
CLTE, Parallel	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			0.33 (0.18)
23 - 55°C (73 - 130°F)			0.29 (0.16)
55 - 160°C (130 - 320°F)			0.19 (0.1)
CLTE, Normal	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			0.74 (0.4)
23 - 55°C (73 - 130°F)			0.95 (0.52)
55 - 160°C (130 - 320°F)			1.25 (0.68)

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Property	Test Method	Units	Value
<b>Flammability</b>			
Flammability Classification 3.0mm	IEC 60695-11-10		V-0
Flammability Classification 0.86mm	UL94		V-0
3.0mm			V-0
<b>Other</b>			
Density	ISO 1183	kg/m <sup>3</sup> (g/cm <sup>3</sup> )	1550 (1.55)
<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)
Injection Speed		s	Fast
Drying Time, Dehumidified Dryer		h	4
Drying Temperature		°C (°F)	120 (250)
Processing Moisture Content		%	<0.02
Hold Pressure Range		MPa (kpsi)	35-140 (5-20)

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