

# DuPont™ Rynite® PET

thermoplastic polyester resin

## Rynite® 935 BK505

Rynite® 935 BK505 is a 35% mica/glass reinforced modified polyethylene terephthalate resin with exceptionally low warpage, excellent electrical properties, high stiffness, and high heat resistance.

Property	Test Method	Units	Value
<b>Identification</b>			
Resin Identification	ISO 1043		PET-(MD+GF)35
Part Marking Code	ISO 11469		>PET-(MD+GF)35<
<b>Mechanical</b>			
Stress at Break	ISO 527	MPa (kpsi)	
-40°C (-40°F)			173 (16)
23°C (73°F)			82 (11.9)
150°C (300°F)			25 (3.7)
Strain at Break	ISO 527	%	
-40°C (-40°F)			1.8
23°C (73°F)			2
150°C (300°F)			5.6
Tensile Modulus	ISO 527	MPa (kpsi)	
-40°C (-40°F)			13020 (1890)
23°C (73°F)			10200 (1480)
150°C (300°F)			2480 (360)

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>Mechanical</b>			
Flexural Modulus	ISO 178	MPa (kpsi)	
-40°C (-40°F)			10880 (1580)
23°C (73°F)			9300 (1350)
Flexural Strength	ISO 178	MPa (kpsi)	
-40°C (-40°F)			190 (28)
23°C (73°F)			132 (19)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	
-40°C (-40°F)			4
-30°C (-22°F)			4
23°C (73°F)			5.5
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	
-40°C (-40°F)			21.5
23°C (73°F)			25
<b>Thermal</b>			
Deflection Temperature	ISO 75-1/-2	°C (°F)	
0.45MPa			240 (464)
1.80MPa			200 (392)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			252 (486)
<b>Electrical</b>			
Electric Strength	IEC 60243-1	kV/mm (V/mil)	
2000 V/s, in oil, 2.0mm			25.0 (636)
Relative Permittivity	IEC 60250		
1E6 Hz			4
Dissipation Factor	IEC 60250	E-4	
1E6 Hz			150

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## Rynite® 935 BK505

Property	Test Method	Units	Value
<b>Flammability</b>			
Flammability Classification	IEC 60695-11-10		
0.75mm			HB75
1.5mm			HB75
3.0mm			HB40
Flammability Classification	UL94		
0.75mm			HB
1.5mm			HB
3.0mm			HB
Glow Wire Flammability Index	IEC 60695-2-12	°C	
0.75mm			775
1.5mm			775
3.0mm			825
Glow Wire Ignition Temperature	IEC 60695-2-13	°C	
0.75mm			800
1.5mm			800
3.0mm			850
<b>Temperature Index</b>			
RTI, Electrical	UL 746B	°C	
0.75mm			140
1.5mm			140
3.0mm			140
RTI, Impact	UL 746B	°C	
0.75mm			140
1.5mm			140
3.0mm			140
RTI, Strength	UL 746B	°C	
0.75mm			140
1.5mm			140
3.0mm			140

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# Product Information

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<b>Other</b>			
Density	ISO 1183	kg/m <sup>3</sup> (g/cm <sup>3</sup> )	1580 (1.58)
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			0.7
Parallel, 2.0mm			0.25
<b>Processing</b>			
Melt Temperature Range		°C (°F)	280-300 (535-570)
Melt Temperature Optimum		°C (°F)	285 (545)
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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