

DuPont™ Rynite® PET

thermoplastic polyester resin

Rynite® FR530 NC010A

Rynite® FR530 NC010A is a 30% glass reinforced, flame retardant, modified polyethylene terephthalate resin approved by UL as UL94V-0 @ 0.35mm. It has an outstanding balance of properties, temperature index and flow characteristics.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		PET-GF30FR(17)
Part Marking Code	ISO 11469		>PET-GF30FR(17)<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	135 (19.6)
Strain at Break	ISO 527	%	2
Tensile Modulus	ISO 527	MPa (kpsi)	11500 (1670)
Flexural Modulus	ISO 178	MPa (kpsi)	10500 (1520)
Flexural Strength	ISO 178	MPa (kpsi)	200 (29.0)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	
-40°C (-40°F)			8
-30°C (-22°F)			9.5
23°C (73°F)			10
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²	
-30°C (-22°F)			40
23°C (73°F)			40

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
Thermal			
Deflection Temperature 0.45MPa	ISO 75-1/-2	°C (°F)	243 (469)
1.80MPa			225 (437)
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	252 (486)
Flammability			
Flammability Classification 0.35mm	IEC 60695-11-10		V-0
1.5mm			V-0
3.0mm			V-0
Flammability Classification 0.35mm	UL94		V-0
1.5mm			V-0
3.0mm			V-0
5V Rating	IEC 60695-11-20		5VA
5V Rating	UL94		5VA
5V Min. Thickness Tested	IEC 60695-11-20	mm	0.9
5V Min. Thickness Tested	UL94	mm	0.9
Glow Wire Flammability Index 0.75mm	IEC 60695-2-12	°C	960
3.0mm			960
Glow Wire Ignition Temperature 0.75mm	IEC 60695-2-13	°C	800
1.5mm			800
2.0mm			985

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Temperature Index			
RTI, Electrical	UL 746B	°C	155
0.35mm			
0.75mm			
1.5mm			
3.0mm			
RTI, Impact	UL 746B	°C	155
0.75mm			
1.5mm			
2.0mm			
3.0mm			
RTI, Strength	UL 746B	°C	155
0.75mm			
1.5mm			
3.0mm			155
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1680 (1.68)
Molding Shrinkage	ISO 294-4	%	0.8
Normal, 2.0mm			
Parallel, 2.0mm			0.2
Processing			
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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