



Rynite® PET

thermoplastic polyester resin

Rynite® FR515 NC010

Rynite® FR515 is a 15% glass fibre reinforced, flame retardant, modified polyethylene terephthalate for injection moulding. It has a UL94 V-0 rating @ 0.8mm and a UL746B temperature index of 140°C.

Property	Test Method	Units	Value
Mechanical			
Stress at Break 5mm/min	ISO 527-1/-2	MPa	107
Strain at Break	ISO 527-1/-2	%	2.6
Tensile Modulus	ISO 527-1/-2	MPa	6800
Flexural Modulus	ISO 178	MPa	
-40°C			6500
23°C			5900
93°C			2400
150°C			1500
Notched Izod Impact	ISO 180/1A	kJ/m2	
-30°C			6
23°C			6.7
Notched Charpy Impact	ISO 179/1eA	kJ/m2	
-30°C			7
23°C			8
Unnotched Charpy Impact	ISO 179/1eU	kJ/m2	
-30°C			35
23°C			40

Contact DuPont for MSDS, general guides and/or additional information about ventilation, handling, purging, drying, etc.
Mechanical properties measured at 23°C unless otherwise stated.

Rynite® is a DuPont registered trademark.

020415/991215

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Property	Test Method	Units	Value
Thermal			
Deflection Temperature 0.45MPa	ISO 75-1/-2	°C	240
1.80MPa			200
Melting Temperature	ISO 3146C	°C	254
Vicat Softening Temperature 50N	ISO 306	°C	210
Electrical			
Surface Resistivity 1mm	IEC 60093	ohm	1E13
Relative Permittivity 100 Hz, 1mm	IEC 60250		3.7
1 MHz, 1mm			3.7
Volume Resistivity 1mm	IEC 60093	ohm cm	1E15
Dissipation Factor 100 Hz, 1mm	IEC 60250	E-4	90
1 MHz, 1mm			150
Electric Strength 1mm	IEC 60243-1	kV/mm	34
Arc Resistance Plate 4mm	UL 746A	s	67
CTI 1mm	IEC 60112	V	225
Flammability			
Flammability Classification 0.8mm	UL94		V-0
1.5mm			5V
Rating @ 1.5mm Nominal	UL94		V-0
Rating @ Thickness	UL94		V-0
Thickness Tested	UL94	mm	0.9
Limited Oxygen Index	ISO 4589	%	32

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Property	Test Method	Units	Value
Temperature Index			
RTI, Electrical 0.86mm 3.0mm	UL 746B	°C	140 140
RTI, Mechanical with Impact 0.86mm 3.0mm	UL 746B	°C	140 140
RTI, Mechanical without Impact 0.86mm 3.0mm	UL 746B	°C	140 140
Other			
Density	ISO 1183	kg/m ³	1530
Hardness, Rockwell Scale M Scale R	ISO 2039/2		88 120
Taber Abrasion CS-17 Wheel, 1kg, 1000 cycles		mg	88
Processing			
Melt Temperature Range		°C	270-290
Melt Temperature Optimum		°C	280
Drying Time, Dehumidified Dryer		h	4
Drying Temperature		°C	120
Processing Moisture Content		%	<0.02
Snake Flow		mm	
90MPa, 5x0.30mm			14
90MPa, 5x0.50mm			52
90MPa, 5x0.75mm			113
90MPa, 5x1.00mm			181

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