

DuPont™ Rynite® PET

thermoplastic polyester resin

Rynite® 415HP BK503

Rynite® 415HP BK503 is a 15% glass reinforced modified polyethylene terephthalate with improved for easy, fast processing over a broad molding range with excellent balance of strength, stiffness, and temperature resistance.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		PET-IGF15
Part Marking Code	ISO 11469		>PET-IGF15<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	80 (11.6)
Strain at Break	ISO 527	%	5
Tensile Modulus	ISO 527	MPa (kpsi)	4500 (650)
Flexural Modulus	ISO 178	MPa (kpsi)	4000 (580)
Notched Izod Impact Strength	ISO 180/1A	kJ/m ²	11
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	11
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²	55
Thermal			
Deflection Temperature 1.80MPa	ISO 75-1/-2	°C (°F)	190 (374)
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	250 (482)

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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The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights. DuPont advises you to seek independent counsel for a freedom to practice opinion on the intended application or end-use of our products. Caution: Do not use this product in medical applications involving implantation in the human body.

For other medical applications see "DuPont Medical Caution Statement", H-50102.

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Property	Test Method	Units	Value
Flammability			
Flammability Classification 0.75mm	IEC 60695-11-10		HB
Flammability Classification 0.75mm	UL94		HB
Glow Wire Flammability Index 0.75mm	IEC 60695-2-12	°C	675
1.5mm			675
3.0mm			750
Glow Wire Ignition Temperature 0.75mm	IEC 60695-2-13	°C	700
1.5mm			700
3.0mm			775
Temperature Index			
RTI, Electrical 0.75mm	UL 746B	°C	140
RTI, Impact 0.75mm	UL 746B	°C	120
RTI, Strength 0.75mm	UL 746B	°C	140
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1390 (1.39)
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)
Drying Time, Dehumidified Dryer		h	4
Drying Temperature		°C (°F)	120 (250)
Processing Moisture Content		%	<0.02

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