

DuPont™ Rynite® PET

thermoplastic polyester resin

Rynite® FR530 BK507

Rynite® FR530 BK507 is a 30% glass reinforced, flame retardant, modified polyethylene terephthalate resin.

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)	130 (18.9)
Strain at Break	ISO 527	%	1.9
Tensile Modulus	ISO 527	MPa (kpsi)	11300 (1640)
Flexural Modulus	ISO 178	MPa (kpsi)	10500 (1520)
Flexural Strength	ISO 178	MPa (kpsi)	200 (29)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	
-40°C (-40°F)			8
23°C (73°F)			9
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²	
-40°C (-40°F)			30
23°C (73°F)			40

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc

Test specimen for ISO 527 is 1BA (2mm) at 50mm/min; all other ISO & ASTM mechanical properties measured at 4mm; ISO electrical properties measured at 2mm

All mechanical & electrical properties measured on injection molded specimen

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

The DuPont Oval Logo, DuPont™, The miracles of science™ and Rynite® are trademarks or registered trademarks of DuPont Company. Copyright© 2011

110726/110816

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials, additives or pigments or in any process, unless expressly indicated otherwise.

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: This product is not permitted to be sold for use in medical applications

involving any implantation in the human body or where contact with internal body fluids or tissues will equal or exceed 24 hours. For applications involving contact of less than 24 hours, see "DuPont Medical Caution Statement", H-50102 and contact your DuPont sales representative.

Rynite® FR530 BK507

Property	Test Method	Units	Value
Thermal			
Deflection Temperature 0.45MPa	ISO 75-1/-2	°C (°F)	243 (469)
1.80MPa			220 (428)
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	252 (486)
CLTE, Parallel -40 - 23°C (-40 - 73°F)	ISO 11359-1/-2	E-4/C (E-4/F)	0.2 (0.11)
23 - 55°C (73 - 130°F)			0.14 (0.08)
55 - 160°C (130 - 320°F)			0.04 (0.02)
CLTE, Normal -40 - 23°C (-40 - 73°F)	ISO 11359-1/-2	E-4/C (E-4/F)	0.73 (0.40)
23 - 55°C (73 - 130°F)			0.9 (0.5)
55 - 160°C (130 - 320°F)			1.21 (0.67)
Electrical			
CTI	IEC 60112	V	225
CTI	UL 746A	V	250
Flammability			
Flammability Classification 0.35mm	IEC 60695-11-10		V-0
Flammability Classification 0.35mm	UL94		V-0
5V Rating	IEC 60695-11-20		5VA
5V Min. Thickness Tested	IEC 60695-11-20	mm	1.5
Glow Wire Flammability Index 0.75mm	IEC 60695-2-12	°C	960
2.0mm			960

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc
 Test specimen for ISO 527 is 1BA (2mm) at 50mm/min; all other ISO & ASTM mechanical properties measured at 4mm; ISO electrical properties measured at 2mm
 All mechanical & electrical properties measured on injection molded specimen
 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

The DuPont Oval Logo, DuPont™, The miracles of science™ and Rynite® are trademarks or registered trademarks of DuPont Company. Copyright© 2011

110726/110816

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials, additives or pigments or in any process, unless expressly indicated otherwise. 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: This product is not permitted to be sold for use in medical applications involving any implantation in the human body or where contact with internal body fluids or tissues will equal or exceed 24 hours. For applications involving contact of less than 24 hours, see "DuPont Medical Caution Statement", H-50102 and contact your DuPont sales representative.

Rynite® FR530 BK507

Property	Test Method	Units	Value
Flammability			
Glow Wire Ignition Temperature	IEC 60695-2-13	°C	
0.75mm			800
1.5mm			800
2.0mm			985
High Amperage Arc Ignition Resistance	UL 746A	arcs	
0.35mm			60
3.0mm			60
Hot Wire Ignition	UL 746A	s	
0.35mm			17
0.75mm			30
1.5mm			120
3.0mm			120
Temperature Index			
RTI, Electrical	UL 746B	°C	
0.35mm			155
RTI, Impact	UL 746B	°C	
0.75mm			155
RTI, Strength	UL 746B	°C	
0.75mm			155
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1680 (1.68)
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			0.8
Parallel, 2.0mm			0.2

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc

Test specimen for ISO 527 is 1BA (2mm) at 50mm/min; all other ISO & ASTM mechanical properties measured at 4mm; ISO electrical properties measured at 2mm

All mechanical & electrical properties measured on injection molded specimen

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

The DuPont Oval Logo, DuPont™, The miracles of science™ and Rynite® are trademarks or registered trademarks of DuPont Company. Copyright© 2011

110726/110816

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials, additives or pigments or in any process, unless expressly indicated otherwise. 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: This product is not permitted to be sold for use in medical applications involving any implantation in the human body or where contact with internal body fluids or tissues will equal or exceed 24 hours. For applications involving contact of less than 24 hours, see "DuPont Medical Caution Statement", H-50102 and contact your DuPont sales representative.

Rynite® FR530 BK507

Property	Test Method	Units	Value
Processing			
Melt Temperature Range		°C (°F)	270-290 (520-555)
Melt Temperature Optimum		°C (°F)	280 (535)
Mold Temperature Range		°C (°F)	90-110 (195-230)
Mold Temperature Optimum		°C (°F)	110 (230)
Drying Time, Dehumidified Dryer		h	4
Drying Temperature		°C (°F)	120 (250)
Processing Moisture Content		%	<0.02

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc

Test specimen for ISO 527 is 1BA (2mm) at 50mm/min; all other ISO & ASTM mechanical properties measured at 4mm; ISO electrical properties measured at 2mm

All mechanical & electrical properties measured on injection molded specimen

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

The DuPont Oval Logo, DuPont™, The miracles of science™ and Rynite® are trademarks or registered trademarks of DuPont Company. Copyright© 2011

110726/110816

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials, additives or pigments or in any process, unless expressly indicated otherwise.

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: This product is not permitted to be sold for use in medical applications involving any implantation in the human body or where contact with internal body fluids or tissues will equal or exceed 24 hours. For applications involving contact of less than 24 hours, see "DuPont Medical Caution Statement", H-50102 and contact your DuPont sales representative.