Technical Data Sheet

Perlex R5563 NGF WHITE 1-1657

Polycarbonate

Product Description

Perlex R5563 NGF WHITE 1-1657 is a Polycarbonate material. Features include: UV Resistant.

Attribute	UV Resistant
Appearance	Opaque
Additive	Flame Retardant; UV Stabilizer
Application	Electrical Parts

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (300 °C/1.2 kg)	12	g/10 min	ISO 1133
Density	1.2	g/cm³	ISO 1183
Mechanical			
Tensile Stress at Yield	60	MPa	ISO 527-2
Tensile Strain at Break	>50	%	ISO 527-2
Flexural Modulus	2400	MPa	ISO 178
Tensile Strain at Yield	5	%	ISO 527-2
Tensile Stress at Break	48	MPa	ISO 527-2
Tensile Modulus	2300	MPa	ISO 527-1
Flexural Stress	95	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C)	47	kJ/m²	ISO 179
(-30 °C)	11	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(-30 °C)	No Break		ISO 179
(23 °C)	No Break		ISO 179
Notched Izod Impact (Area), (23 °C)	45.0	kJ/m²	ASTM D256
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	145	°C	ISO 306
(A (10N), 50 °C/h)	150	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa)	135	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa)	130	°C	ISO 75-2/A

RTI Elec			
(1.5 mm)	80.0	°C	UL 746B
(3.0 mm)	80.0	°C	UL 746B
RTI Imp			
(1.5 mm)	80.0	°C	UL 746B
(3.0 mm)	80.0	°C	UL 746B
RTI Str			
(1.5 mm)	80.0	°C	UL 746B
(3.0 mm)	80.0	°C	UL 746B
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	175	V	IEC 60112
High Amp Arc Ignition			UL 746A
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Hot-wire Ignition (HWI)			UL 746A
Burning Rate			
(2.00 mm)	0.0	mm/min	ISO 3795
(2.00 mm)	0.0	mm/min	FMVSS 302
Glow Wire Flammability Index			
(1.5 mm)	960	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	850	°C	IEC 60695-2-13
(3.0 mm)	850	°C	IEC 60695-2-13
UL Information			
Flame Rating			
(1.5 mm)	V-0		UL 94
(3.0 mm)	V-0		UL 94

Injection Parameters	Nominal Value	Units
Drying Time	3.0 to 4.0	hr
Drying Temperature	110 to 120	°C
Processing (Melt) Temp	270 to 310	°C
Mold Temperature	50 to 80	°C