

Perlex R5563 NATURAL

LyondellBasell Industries - Polycarbonate

General Information

Product Description

Perlex R5563 NATURAL is a Polycarbonate material. Features include: UV Resistant.

General

Additive	• Flame Retardant	• UV Stabilizer	
Features	• Flame Retardant	• UV Resistant	• UV Stabilized
Uses	• Electrical Parts		
Appearance	• Opaque		

Properties¹

Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	12	g/10 min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	334000	psi	ISO 527-1
Tensile Stress (Yield)	8700	psi	ISO 527-2
Tensile Stress (Break)	6960	psi	ISO 527-2
Tensile Strain (Yield)	5.0	%	ISO 527-2
Tensile Strain (Break)	> 50	%	ISO 527-2
Flexural Modulus	348000	psi	ISO 178
Flexural Stress	13800	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F	5.2	ft·lb/in ²	
73°F	22	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179
-22°F	No Break		
73°F	No Break		
Notched Izod Impact (Area) (73°F)	21.4	ft·lb/in ²	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	275	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	266	°F	ISO 75-2/A
Vicat Softening Temperature			
--	293	°F	ISO 306/B50
--	302	°F	ISO 306/A50
RTI Elec			UL 746B
0.06 in	176	°F	
0.12 in	176	°F	
RTI Imp			UL 746B
0.06 in	176	°F	
0.12 in	176	°F	

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RTI Str			UL 746B
0.06 in	176	°F	
0.12 in	176	°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Comparative Tracking Index	175	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Burning Rate			
0.0787 in	0.0	in/min	FMVSS 302
0.0787 in	0.0	in/min	ISO 3795
Flame Rating			UL 94
0.06 in	V-0		
0.12 in	V-0		
Glow Wire Flammability Index			IEC 60695-2-12
0.06 in	1760	°F	
0.12 in	1760	°F	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 in	1560	°F	
0.12 in	1560	°F	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230 to 248	°F
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	518 to 590	°F
Mold Temperature	122 to 176	°F