

Technical Data Sheet

Lucent Pc PC-FR0

Polycarbonate
LyondellBasell Industries
Engineering Plastics

Product Description

Polycarbonate, UL Recognized 94 V-0, 94 5VA

UV Stable/Weatherable, f1 Rated - Colors Available
Elevated RTI - 105°C
Melt Flow Adjustable for Application
UL File Number: E51193

General

UL File Number	• E51193
Appearance	• Colors Available

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.21	1.21 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/2.16 Kg)	10 g/10 min	10 g/10 min	ASTM D1238
Outdoor Suitability	f1	f1	UL 746C
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	348000 psi	2400 MPa	ASTM D638
Tensile Strength			ASTM D638
Yield	8700 psi	60.0 MPa	
Break	6960 psi	48.0 MPa	
Tensile Elongation			ASTM D638
Yield	3.8 %	3.8 %	
Break	> 60 %	> 60 %	
Flexural Modulus	351000 psi	2420 MPa	ASTM D790
Flexural Strength	13100 psi	90.3 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F (-30°C)	5.0 ft·lb/in²	11 kJ/m²	
73°F (23°C)	9.5 ft·lb/in²	20 kJ/m²	
Notched Izod Impact			ASTM D256
-22°F (-30°C)	2.3 ft·lb/in	120 J/m	
73°F (23°C), 0.125 In (3.18 Mm)	6.5 ft·lb/in	350 J/m	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-scale)	122	122	ASTM D785
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 Psi (0.45 Mpa), Unannealed	271 °F	133 °C	
264 Psi (1.8 Mpa), Unannealed	250 °F	121 °C	
Vicat Softening Temperature	280 °F	138 °C	ASTM D1525 ¹
CLTE			ASTM E831
Flow : -40 To 203°F (-40 To 95°C)	3.4E-5 in/in/°F	6.1E-5 cm/cm/°C	
Transverse : -40 To 203°F (-40 To 95°C)	3.5E-5 in/in/°F	6.3E-5 cm/cm/°C	
RTI Elec	221 °F	105 °C	UL 746B
RTI Imp	221 °F	105 °C	UL 746B
RTI Str	221 °F	105 °C	UL 746B
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Volume Resistivity	4.6E+15 ohms·cm	4.6E+15 ohms·cm	ASTM D257

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	250 °F	121 °C
Suggested Max Moisture	< 0.02 %	< 0.02 %
Rear Temperature	480 to 530 °F	249 to 277 °C
Middle Temperature	480 to 550 °F	249 to 288 °C
Front Temperature	480 to 550 °F	249 to 288 °C
Nozzle Temperature	480 to 550 °F	249 to 288 °C
Processing (Melt) Temp	480 to 550 °F	249 to 288 °C
Mold Temperature	160 to 220 °F	71 to 104 °C
Back Pressure	< 100 psi	< 0.689 MPa
Screw Speed	40 to 75 rpm	40 to 75 rpm

Notes

¹ Rate A (50°C/h), Loading 2 (50 N)

Notes

These are typical property values not to be construed as specification limits.