

Network Polymers Pc 1029

Polycarbonate
LyondellBasell Industries
Engineering Plastics

General			
Features	• Food Contact Acceptable		
Agency Ratings	• FDA 21 CFR 177.1580		
UL File Number	• E150937		
Appearance	• Natural Color		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.20	1.20 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹ (300°C/1.2 Kg)	20 g/10 min	20 g/10 min	ASTM D1238
Water Absorption (24 Hr, 73°F (23°C))	0.15 %	0.15 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Yield)	9000 psi	62.1 MPa	ASTM D638
Flexural Modulus ³	345000 psi	2380 MPa	ASTM D790B
Flexural Strength ³	13000 psi	89.6 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.125 In (3.18 Mm))	12 ft·lb/in	640 J/m	ASTM D256A
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-scale)	120	120	ASTM D785
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 Psi (1.8 Mpa), Unannealed, 0.125 In (3.18 Mm)	260 °F	127 °C	ASTM D648
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 In (1.5 Mm), All)	V-2	V-2	UL 94



Network Polymers Pc 1029

Polycarbonate
LyondellBasell Industries
Engineering Plastics



Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	248 °F	120 °C
Drying Time - Desiccant Dryer	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Suggested Shot Size	40 to 60 %	40 to 60 %
Rear Temperature	500 to 536 °F	260 to 280 °C
Middle Temperature	518 to 563 °F	270 to 295 °C
Front Temperature	536 to 581 °F	280 to 305 °C
Nozzle Temperature	518 to 572 °F	270 to 300 °C
Processing (Melt) Temp	536 to 581 °F	280 to 305 °C
Mold Temperature	176 to 212 °F	80 to 100 °C
Back Pressure	43.5 to 102 psi	0.300 to 0.700 MPa
Screw Speed	40 to 70 rpm	40 to 70 rpm
Vent Depth	9.8E-4 to 3.0E-3 in	0.025 to 0.076 mm

Notes

- ¹ Procedure A
- ² 2.0 in/min (51 mm/min)
- ³ Method I (3 point load), 0.050 in/min (1.3 mm/min)

Notes

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

