

Diamond PC 1029 CLEAR

LyondellBasell Industries - Polycarbonate

General Information

Product Description

Diamond PC 1029 CLEAR is a Polycarbonate material. Features include: Food Contact Acceptable.

General

Features	• Food Contact Acceptable
Appearance	• Natural Color

Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (MFR) ² (300°C/1.2 kg)	20	g/10 min	ASTM D1238
Water Absorption (24 hr, 73°F)	0.15	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ³ (Yield)	9010	psi	ASTM D638
Flexural Modulus ⁴	345000	psi	ASTM D790B
Flexural Strength ⁴	13000	psi	ASTM D790B
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	12	ft-lb/in	ASTM D256A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	120		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed, 0.125 in	261	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-2		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248	°F
Drying Time - Desiccant Dryer	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	40 to 60	%
Rear Temperature	500 to 536	°F
Middle Temperature	518 to 563	°F
Front Temperature	536 to 581	°F
Nozzle Temperature	518 to 572	°F
Processing (Melt) Temp	536 to 581	°F
Mold Temperature	176 to 212	°F
Back Pressure	43.5 to 102	psi
Screw Speed	40 to 70	rpm
Vent Depth	9.8E-4 to 3.0E-3	in