

# Clariant PC PC-1100

Polycarbonate

Clariant Corporation

## Message:

Clariant PC PC-1100 is a polycarbonate (PC) material. This product is available in North America and is processed by injection molding.

The main features of Clariant PC PC-1100 are:

flame retardant/rated flame

high strength

Good processability

Hard

Corrosion resistance

Typical application areas include:

military applications

Sporting goods

General Information			
Features	Good dimensional stability Rigidity, high High strength Workability, good Good corrosion resistance Good coloring Good chemical resistance Good toughness Low or no water absorption		
Uses	Metal substitution Military application Sporting goods		
Appearance	Available colors Natural color		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.20	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.60	%	ASTM D955
Water Absorption			ASTM D570
24 hr	0.15	%	ASTM D570
Saturation	0.35	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	78		ASTM D785

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	62.1	MPa	ASTM D638
Tensile Elongation (Yield)	90	%	ASTM D638
Flexural Modulus	2280	MPa	ASTM D790
Flexural Strength	93.1	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (3.18 mm)	800	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	132	°C	ASTM D648
1.8 MPa, not annealed	129	°C	ASTM D648
CLTE - Flow	1.3E-4	cm/cm/°C	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	15	kV/mm	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-2		UL 94
Injection	Nominal Value	Unit	
Drying Temperature	121	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.020	%	
Rear Temperature	304 - 343	°C	
Middle Temperature	304 - 343	°C	
Front Temperature	304 - 343	°C	
Processing (Melt) Temp	304 - 327	°C	
Melt Temperature (Aim)	316	°C	
Mold Temperature	82.2 - 121	°C	
Injection Rate	Fast		
Back Pressure	0.345 - 0.689	MPa	
Screw Speed	45 - 75	rpm	
Cushion	3.18 - 6.35	mm	

#### Injection instructions

The minimum injection pressure required to fill the part should be used for the first stage. The hold pressure should be set between 50% and 75% of the injection pressure.

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#### Recommended distributors for this material

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