

Opticarb 1012UR

The Materials Group - Polycarbonate

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Mold Release
Features	• UV Resistant
Appearance	• Clear/Transparent
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.21		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	9000	psi	ASTM D638
Tensile Strength (Break)	8100	psi	ASTM D638
Tensile Elongation (Break)	90	%	ASTM D638
Flexural Modulus	325000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	12	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	270	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Processing (Melt) Temp	559 to 601	°F

Injection Notes

Exact processing temp will vary w/ part. Starting mid-lower range is typical. Contact TMG for on-site technical support.

Notes

¹ Typical properties: these are not to be construed as specifications.

