Opticarb 8085

The Materials Group - *Polycarbonate + ABS*

General Information

General			
Material Status	• Commercial: Active		
Availability	• North America		
Features	• General Purpose		
Uses	• General Purpose		
Appearance	• Black	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.13	g/cm³	ISO 1183/A
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	26	g/10 min	ISO 1133
Molding Shrinkage (0.125 in)	0.40 to 0.70	%	ISO 294-4
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	334000	psi	ISO 527-1
Tensile Stress (Yield)	7830	psi	ISO 527-2
Tensile Strain (Yield)	4.6	%	ISO 527-2
Flexural Modulus	334000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	27	ft·lb/in²	ISO 179
Instrumented Dart Impact			ASTM D3763
-22°F	549	in·lb	
73°F	460	in·lb	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	230	°F	ISO 75-2/A
Vicat Softening Temperature	253	°F	ISO 306
CLTE - Flow	3.9E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	4.1E-5	in/in/°F	ISO 11359-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	203 to 221	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	450 to 500	°F
Middle Temperature	485 to 555	°F
Front Temperature	485 to 555	°F
Nozzle Temperature	465 to 535	°F
Processing (Melt) Temp	500 to 550	°F
Mold Temperature	140 to 190	°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.