

Grade: Orion™ PCHC7100 (f1)

Molding Grade: FR Polycarbonate with 10% Glass

Typical Material Properties

Physical	Nominal Values	ASTM Test
Specific Gravity	1.26	D792
Melt Flow (300°C/1.2 kg)	12.0 g/10 min	D1238
Mechanical		
Tensile Modulus	480,000 psi	D638
Tensile Strength @ Yield	9,400 psi	D638
Flexural Modulus	490,000 psi	D790
Flexural Strength @ Yield	14,500 psi	D790
Impact		
Notched Izod Impact (73°F, 0.125 in)	2.0 ft-lb/in	D256
Thermal		
DTUL @ 264 psi – Unannealed (0.125 in)	288°F	D648
Mold Shrinkage		
Linear Flow	.003 – .005 in/in	D955
UL Rating		
Flammability	(f1)	UL746C
RTI	V-0 @ 1.5mm, 5VA @ 2.4mm	UL 94
Non-Chlorinated & Non-Brominated	125°C, 115°C, 125°C	UL746B UL746H

The information provided above is based upon typical values, and is intended only as a guide. Star Plastics, LLC assumes no obligation or liability for any advice furnished or for any results obtained with respect to this information. *No guarantees or warranties are expressed or implied.*

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Recommended Processing Guidelines

	Nominal Values
Drying Time and Temperature	4.0 hrs at 250°F
Suggested Max Moisture	0.020%
Rear Temperature	520 – 550°F
Middle Temperature	530 – 570°F
Front Temperature	550 – 600°F
Nozzle Temperature	550 – 600°F
Processing (Melt) Temperature	550 – 610°F
Mold Temperature	150 – 220°F
Back Pressure	50 – 100 psi
Screw Speed	40 – 75 RPM

The conditions listed above are only guidelines. You may want to adjust conditions to meet your requirements.