

Access: 5/9/23

## Grade: Orion™ PCHC7450 (f2)

Molding Grade PCFR w/ UV, R, Cold Temp Impact Modified, All Colors but Clear, Non-Chlorinated & Non-Brominated

## **Typical Material Properties**

Physical	Nominal Values	ASTM Test	
Specific Gravity	1.19	D792	
Melt Flow (300°C/1.2 kg)	10.0 g/10 min	D1238	
Mechanical			
Tensile Modulus	320,000 psi	D638	
Tensile Strength @ Yield	8,400 psi	D638	
Flexural Modulus	348,000 psi	D790	
Flexural Strength @ Yield	9,000 psi	D790	
Impact			
Notched Izod Impact (73°F, 0.125 in)	17.0 ft-lb/in	D256	
Notched Izod Impact (-40°F, 0.125 in)	14.0 ft-lb/in	D256	
Thermal			
DTUL @ 264 psi – Unannealed (0.125 in)	270°F	D648	
Mold Shrinkage			
Linear Flow	.004 – .008 in/in	D955	
UL Rating	(f2)	UL746C	
Flammability	V-0 @ 1.5mm, 5VA @ 3.0mm	UL 94	
RTI	125°C, 115°C, 125°C	UL746B	
Non-Chlorinated & Non-Brominated		UL746H	
Electrical			
Dielectric Constant 60Hz	2.95	ASTM D150	
Dielectric Constant 1MHz	2.90	ASTM D150	

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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 – 600°F
Mold Temperature	170 – 220°F
Back Pressure	50 – 100 psi
Screw Speed	40 – 75 RPM