

## GRADE: ORION® PCHC7301 (F1)

Molding Grade PCFR w/ UV and Release, All Colors but Clear  
NCNB (Non-Chlorinated & Non-Brominated)

### Typical Material Properties

Physical	Nominal Values	ASTM Test
Specific Gravity	1.20	D792
Melt Flow (300°C/1.2 kg)	16.0 g/10 min	D1238
<b>Mechanical</b>		
Tensile Modulus	350,000 psi	D638
Tensile Strength @ Yield	8,800 psi	D638
Flexural Modulus	350,000 psi	D790
Flexural Strength @ Yield	13,000 psi	D790
<b>Impact</b>		
Notched Izod Impact (73°F, 0.125 in)	14.0 ft-lb/in	D256
<b>Thermal</b>		
DTUL @ 264 psi – Unannealed (0.125 in)	260°F	D648
<b>Mold Shrinkage</b>		
Linear Flow	.005 – .007 in/in	D955
<b>UL Rating</b>		
Flammability	(f1) V-0 @ 1.5mm	<b>UL746C</b> UL 94
RTI	125°C, 115°C, 125°C	UL746B
Non-Chlorinated & Non-Brominated		UL746H

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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

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