

Orion™ RESINS

Grade: PCHC7451 (f2)

Molding Grade: PCFR w/ UV, R, Cold Temp Impact Modified, All Colors but Clear, NCNB



TYPICAL MATERIAL PROPERTIES

Physical	Nominal Values	ASTM Test
Specific Gravity	1.19	D792
Melt Flow (300°C/1.2 kg)	6.0 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)	17.0 ft-lb/in	D256
Notched Izod Impact (-40 °F, 0.125)	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

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

Rev0

Technical Data Sheet

StarPlastics.com

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Navigating Custom Compounds

