

ORION® RESINS

Grade: PC/PBT7804
Molding Grade PC/PBT



Typical Material Properties

Physical	Nominal Values	ASTM Test
Specific Gravity	1.20	D792
Melt Flow (230°C/3.8 kg)	4.0 g/10 min	D1238
Mechanical		
Tensile Modulus	275,000 psi	D638
Tensile Strength @ Yield	7,000 psi	D638
Flexural Modulus	285,000 psi	D790
Flexural Strength @ Yield	10,500 psi	D790
Impact		
Notched Izod Impact (73°F, 0.125 in)	12.5 ft-lb/in	D256
Thermal		
DTUL @ 264 psi-unannealed (0.250 in)	215 °F	D648
Mold Shrinkage		
Linear Flow	.008 - .011 in/in	D955

Recommended Processing Guidelines

	Nominal Values
Drying Time and Temperature	4.0 hrs at 240°F
Suggested Max Moisture	0.020%
Rear Temperature	460 – 480°F
Middle Temperature	475 – 510°F
Front Temperature	480 – 540°F
Nozzle Temperature	495 – 525°F
Processing (Melt) Temperature	495 – 535°F
Mold Temperature	120 – 170°F
Back Pressure	50 – 100 psi
Screw Speed	40 – 75 RPM

Navigating Custom Compounds