# GRADE: ORION® PCHC7552 (F1)

Molding Grade PCFR w/ UV, R, Cold Temp Impact Modified; All Colors
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) | 275°F | D648 | |
| **Mold Shrinkage** | | | |
| Linear Flow | .004 – .008 in/in | D955 | |
| **UL Rating** | **(f1)** | **UL746C** | |
| Flammability | V-0 @ 1.5mm, 5VA @ 2.5mm | 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.