

Grade: Orion™ PC/ABSQX7020

Molding Grade PC/ABS Alloy designed for Plating Grade Applications

with Cold Temperature Impact Properties

**Typical Material Properties**

|  |  |  |  |
| --- | --- | --- | --- |
| **Physical** | **Nominal Values** | **ASTM Test** | |
| Specific Gravity | 1.14 | D792 |  |
| Melt Flow (260°C/5.0 kg) | 14.0 g/10 min | D1238 |
|  |  |  |  |
| **Mechanical** |  |  |  |
| Tensile Modulus | 310,000 psi | D638 |  |
| Tensile Strength @ Yield | 8,000 psi | D638 |
| Flexural Modulus | 340,000 psi | D790 |
| Flexural Strength @ Yield | 12,600 psi | D790 |
|  |  |  |  |
| **Impact** |  |  |  |
| Notched Izod Impact (73°F, 0.125 in)  Notched Izod Impact (-22°F, 0.125 in) | 12.0 ft-lb/in  8.0 ft-lb/in | D256  D256 |  |
|  |  |  |  |
| **Thermal** |  |  |  |
| DTUL @ 264 psi – Unannealed (0.250 in) | 230°F | D648 |  |
|  |  |  |  |
| **Mold Shrinkage** |  |  |  |
| Linear Flow | .005 – .008 in/in | D955 |  |

The information provided above is based upon typical values, and is intended only as a guide. Star Plastics, LLC assumes no obligation or liability for any advice furnished or for any results obtained with respect to this information. *No guarantees or warranties are expressed or implied.*

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**Recommended Processing Guidelines**

|  |  |  |
| --- | --- | --- |
| **Nominal Values** | | |
| Drying Time and Temperature | 3.0 - 4.0 hrs at 180 - 230°F |  |
| Suggested Max Moisture | 0.020% |  |
| Rear Temperature | 460 – 525°F |  |
| Middle Temperature | 480 – 525°F |  |
| Front Temperature | 500 – 550°F |  |
| Nozzle Temperature | 500 – 550°F |  |
| Processing (Melt) Temperature | 500 – 550°F |  |
| Mold Temperature | 160 – 210°F |  |
| Back Pressure | 50 – 100 psi |  |
| Screw Speed | 30 – 75 RPM |  |

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

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