

Nylene® 52GR30 IM8

Polymeric Resources Corporation (PRC) - *Polyamide 6*

General Information

Product Description

30% Glass Reinforced, Improved Impact Resistance, Nylon 6

General

| | |
|------------------------|-------------------------------------|
| Material Status | • Commercial: Active |
| Availability | • North America |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight |
| Features | • Good Impact Resistance |
| Appearance | • Natural Color |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|---------------|----------|-------------|
| Density / Specific Gravity | 1.34 | | ASTM D792 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Yield, 73°F) | 22500 | psi | ASTM D638 |
| Tensile Elongation (Break) | 3.0 | % | ASTM D638 |
| Flexural Modulus | 1.20E+6 | psi | ASTM D790 |
| Flexural Strength | 26500 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (73°F, 0.125 in) | 2.8 | ft-lb/in | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 405 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in) | 376 | °F | ASTM D648 |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating (0.12 in) | HB | | UL 94 |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | 180 | °F |
| Drying Time | 2.0 to 4.0 | hr |
| Suggested Max Moisture | 0.20 | % |
| Rear Temperature | 460 to 520 | °F |
| Middle Temperature | 480 to 520 | °F |
| Front Temperature | 480 to 520 | °F |
| Nozzle Temperature | 480 to 559 | °F |
| Processing (Melt) Temp | 480 to 559 | °F |
| Mold Temperature | 81 to 160 | °F |
| Back Pressure | 50.0 to 100 | psi |

Notes

¹ Typical properties: these are not to be construed as specifications.

