

## Nylene® 52RGR33BK

Polymeric Resources Corporation (PRC) - *Polyamide 6*

### General Information

#### Product Description

33% Glass Reinforced, Pre-Colored Black, Post-Industrial Recycle Grade\*, Nylon 6

#### General

|                        |                                      |
|------------------------|--------------------------------------|
| Material Status        | • Commercial: Active                 |
| Availability           | • North America                      |
| Filler / Reinforcement | • Glass Fiber, 33% Filler by Weight  |
| Recycled Content       | • Post-Industrial (PIR)/Pre-Consumer |
| Appearance             | • Black                              |
| Forms                  | • Pellets                            |
| Processing Method      | • Injection Molding                  |

### Properties <sup>1</sup>

| Physical                                                          | Nominal Value | Unit     | Test Method |
|-------------------------------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity                                        | 1.39          |          | ASTM D792   |
| Mechanical                                                        | Nominal Value | Unit     | Test Method |
| Tensile Strength (Yield, 73°F)                                    | 21000         | psi      | ASTM D638   |
| Tensile Elongation (Break)                                        | 3.0           | %        | ASTM D638   |
| Flexural Modulus                                                  | 1.10E+6       | psi      | ASTM D790   |
| Flexural Strength                                                 | 37600         | psi      | ASTM D790   |
| Impact                                                            | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (73°F, 0.125 in)                              | 1.5           | ft·lb/in | ASTM D256   |
| Thermal                                                           | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)            | 421           | °F       | ASTM D648   |
| Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in) | 399           | °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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

