

**Technical Data Sheet**  
**FERREX® GPP35CN**  
 Polypropylene  
 Engineering Plastics

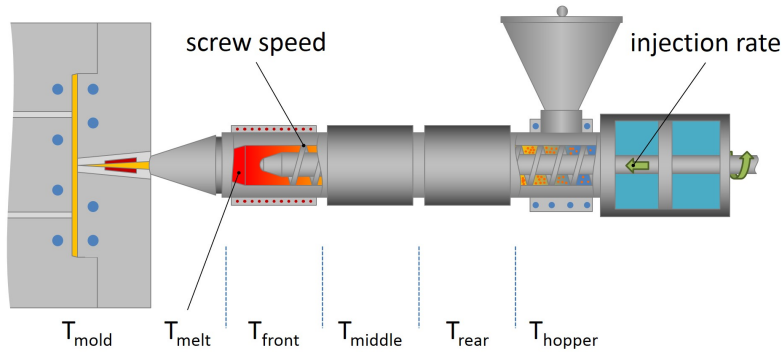


**General**

|                        |   |
|------------------------|---|
| Filler / Reinforcement | • Calcium Carbonate, 36% Filler by Weight                   |
| Features               | • Good Impact Resistance • Good Processability • High Gloss |
| Uses                   | • Lawn and Garden Equipment                                 |
| Forms                  | • Pellets   |

| <b>Physical</b>                           | <b>Nominal Value (English)</b> | <b>Nominal Value (SI)</b> | <b>Test Method</b> |
|---|--------------------------------|---------------------------|--------------------|
| Density / Specific Gravity                | 1.20                           | 1.19 g/cm <sup>3</sup>    | ASTM D792          |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 21 g/10 min                    | 21 g/10 min               | ASTM D1238         |
| Molding Shrinkage - Flow                  | 0.012 to 0.014 in/in           | 1.2 to 1.4 %              | ASTM D955          |
| <b>Mechanical</b>                         | <b>Nominal Value (English)</b> | <b>Nominal Value (SI)</b> | <b>Test Method</b> |
| Tensile Strength (Yield)                  | 3500 psi                       | 24.1 MPa                  | ASTM D638          |
| Tensile Elongation (Break)                | 33 %                           | 33 %                      | ASTM D638          |
| Flexural Modulus                          | 350000 psi                     | 2410 MPa                  | ASTM D790          |
| Flexural Strength (Yield)                 | 6100 psi                       | 42.1 MPa                  | ASTM D790          |
| <b>Impact</b>                             | <b>Nominal Value (English)</b> | <b>Nominal Value (SI)</b> | <b>Test Method</b> |
| Notched Izod Impact (73°F (23°C))         | 0.50 ft·lb/in                  | 27 J/m                    | ASTM D256          |
| Unnotched Izod Impact (73°F (23°C))       | 10 ft·lb/in                    | 530 J/m                   | ASTM D256          |
| Gardner Impact (0.125 in (3.18 mm))       | 50.0 in·lb                     | 5.65 J                    | ASTM D3029         |
| <b>Hardness</b>                           | <b>Nominal Value (English)</b> | <b>Nominal Value (SI)</b> | <b>Test Method</b> |
| Durometer Hardness (Shore D)              | 67                             | 67                        | ASTM D2240         |
| <b>Thermal</b>                            | <b>Nominal Value (English)</b> | <b>Nominal Value (SI)</b> | <b>Test Method</b> |
| Deflection Temperature Under Load         |                                |                           | ASTM D648          |
| 66 psi (0.45 MPa), Unannealed             | 225 °F                         | 107 °C                    |                    |
| 264 psi (1.8 MPa), Unannealed             | 140 °F                         | 60.0 °C                   |                    |

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| Injection               | Nominal Value (English)         | Nominal Value (SI)            |
|-------------------------|---------------------------------|-------------------------------|
| Drying Temperature      | 200 °F                          | 93 °C                         |
| Drying Time             | 2.0 to 3.0 hr                   | 2.0 to 3.0 hr                 |
| Rear Temperature        | 390 to 400 °F                   | 199 to 204 °C                 |
| Middle Temperature      | 400 to 410 °F                   | 204 to 210 °C                 |
| Front Temperature       | 410 to 420 °F                   | 210 to 216 °C                 |
| Nozzle Temperature      | 420 to 430 °F                   | 216 to 221 °C                 |
| Mold Temperature        | 115 to 140 °F                   | 46 to 60 °C                   |
| Back Pressure           | 20.0 to 50.0 psi                | 0.138 to 0.345 MPa            |
| Screw Speed             | 100 to 150 rpm                  | 100 to 150 rpm                |
| Clamp Tonnage           | 2.0 to 3.0 tons/in <sup>2</sup> | 2.8 to 4.1 kN/cm <sup>2</sup> |
| Screw L/D Ratio         | 20.0:1.0                        | 20.0:1.0                      |
| Screw Compression Ratio | 2.0:1.0                         | 2.0:1.0                       |

**Notes**

These are typical property values not to be construed as specification limits.