

Technical Data Sheet

# Ferrex GPP35CN

Polypropylene  
LyondellBasell Industries  
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                                 |                       |              |

| Physical                                  | Nominal Value (English) | Nominal Value (SI)     | Test Method |
|---|-------------------------|------------------------|-------------|
| 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  |

| Mechanical                 | Nominal Value (English) | Nominal Value (SI) | Test Method |
|----------------------------|-------------------------|--------------------|-------------|
| 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   |

| Impact                              | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-------------------------------------|-------------------------|--------------------|-------------|
| 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 D4812  |
| Gardner Impact (0.125 In (3.18 Mm)) | 50.0 in·lb              | 5.65 J             | ASTM D3029  |

| Hardness                     | Nominal Value (English) | Nominal Value (SI) | Test Method |
|------------------------------|-------------------------|--------------------|-------------|
| Durometer Hardness (Shore D) | 67                      | 67                 | ASTM D2240  |

| Thermal                           | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------|-------------------------|--------------------|-------------|
| 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.