

Technical Data Sheet

## Ferrex GPP40CF

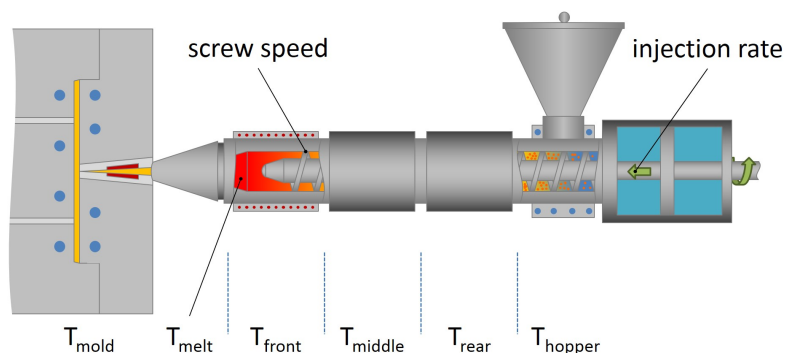
Polypropylene  
LyondellBasell Industries  
Engineering Plastics

| General                           |                                           |                        |             |
|-----------------------------------|-------------------------------------------|------------------------|-------------|
| Filler / Reinforcement            | • Calcium Carbonate, 40% Filler by Weight |                        |             |
| Features                          | • High Gloss                              |                        |             |
| Forms                             | • Pellets                                 |                        |             |
| Processing Method                 | • Injection Molding                       |                        |             |
| Physical                          | Nominal Value (English)                   | Nominal Value (SI)     | Test Method |
| Density / Specific Gravity        | 1.24                                      | 1.24 g/cm <sup>3</sup> | ASTM D792   |
| Melt Mass-Flow Rate (MFR)         | 20 g/10 min                               | 20 g/10 min            | ASTM D1238  |
| Mechanical                        | Nominal Value (English)                   | Nominal Value (SI)     | Test Method |
| Tensile Strength (Yield)          | 3300 psi                                  | 22.8 MPa               | ASTM D638   |
| Tensile Elongation (Break)        | 50 %                                      | 50 %                   | ASTM D638   |
| Flexural Modulus                  | 300000 psi                                | 2070 MPa               | ASTM D790   |
| Flexural Strength (Yield)         | 5200 psi                                  | 35.9 MPa               | ASTM D790   |
| Impact                            | Nominal Value (English)                   | Nominal Value (SI)     | Test Method |
| Notched Izod Impact               |                                           |                        | ASTM D256   |
| 73°F (23°C), 0.125 In (3.18 Mm)   | 0.75 ft·lb/in                             | 40 J/m                 |             |
| Unnotched Izod Impact             |                                           |                        | ASTM D4812  |
| 73°F (23°C), 0.125 In (3.18 Mm)   | 10 ft·lb/in                               | 530 J/m                |             |
| Gardner Impact                    | 30.0 in·lb                                | 3.39 J                 | ASTM D3029  |
| Hardness                          | Nominal Value (English)                   | Nominal Value (SI)     | Test Method |
| Durometer Hardness (Shore D)      | 74                                        | 74                     | ASTM D2240  |
| Thermal                           | Nominal Value (English)                   | Nominal Value (SI)     | Test Method |
| Deflection Temperature Under Load |                                           |                        | ASTM D648   |
| 66 Psi (0.45 Mpa), Unannealed     | 255 °F                                    | 124 °C                 |             |
| 264 Psi (1.8 Mpa), Unannealed     | 155 °F                                    | 68.3 °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.