

Technical Data Sheet

## Ferro Pp TPP40AC74BK

Polypropylene  
LyondellBasell Industries  
Engineering Plastics

| General                                   |                              |                        |             |
|-------------------------------------------|------------------------------|------------------------|-------------|
| Filler / Reinforcement                    | • Talc, 40% Filler by Weight |                        |             |
| Appearance                                | • Black                      |                        |             |
| Forms                                     | • Pellets                    |                        |             |
| Processing Method                         | • Injection Molding          |                        |             |
| Physical                                  | Nominal Value (English)      | Nominal Value (SI)     | Test Method |
| Density / Specific Gravity                | 1.26                         | 1.26 g/cm <sup>3</sup> | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 Kg) | 5.0 g/10 min                 | 5.0 g/10 min           | ASTM D1238  |
| Mechanical                                | Nominal Value (English)      | Nominal Value (SI)     | Test Method |
| Tensile Strength (Yield)                  | 4500 psi                     | 31.0 MPa               | ASTM D638   |
| Tensile Elongation (Break)                | 10 %                         | 10 %                   | ASTM D638   |
| Flexural Modulus                          | 400000 psi                   | 2760 MPa               | ASTM D790   |
| Flexural Strength (Yield)                 | 6500 psi                     | 44.8 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))       | 5.0 ft·lb/in                 | 270 J/m                | ASTM D4812  |
| Gardner Impact                            | 10.0 in·lb                   | 1.13 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             | 270 °F                       | 132 °C                 |             |
| 264 Psi (1.8 Mpa), Unannealed             | 180 °F                       | 82.2 °C                |             |

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| Injection               | Nominal Value (English)         | Nominal Value (SI)            |
|-------------------------|---------------------------------|-------------------------------|
| Drying Temperature      | 176 °F                          | 80 °C                         |
| Drying Time             | 2.0 to 3.0 hr                   | 2.0 to 3.0 hr                 |
| Rear Temperature        | 400 to 410 °F                   | 204 to 210 °C                 |
| Middle Temperature      | 410 to 415 °F                   | 210 to 213 °C                 |
| Front Temperature       | 415 to 420 °F                   | 213 to 216 °C                 |
| Nozzle Temperature      | 420 to 425 °F                   | 216 to 218 °C                 |
| Processing (Melt) Temp  | 428 to 500 °F                   | 220 to 260 °C                 |
| Mold Temperature        | 86 to 140 °F                    | 30 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.