

# Gapex APP40GR22HB-BK

Polypropylene Homopolymer

LyondellBasell Industries

Engineering Plastics

| General                |                                       |  |  |
|------------------------|---------------------------------------|--|--|
| Filler / Reinforcement | • Glass\Mineral, 40% Filler by Weight |  |  |
| Features               | • Chemically Coupled                  |  |  |
| Appearance             | • Black                               |  |  |
| Forms                  | • Pellets                             |  |  |

| 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) | 4.0 g/10 min            | 4.0 g/10 min           | ASTM D1238  |

| Mechanical                              | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------------|-------------------------|--------------------|-------------|
| Tensile Strength (73°F (23°C))          | 7500 psi                | 51.7 MPa           | ASTM D638   |
| Tensile Elongation (Break, 73°F (23°C)) | 3.5 %                   | 3.5 %              | ASTM D638   |
| Flexural Modulus                        |                         |                    | ASTM D790   |
| 1% Secant : 73°F (23°C)                 | 655000 psi              | 4520 MPa           |             |
| Tangent : 73°F (23°C)                   | 770000 psi              | 5310 MPa           |             |
| Flexural Strength (73°F (23°C))         | 12600 psi               | 86.9 MPa           | ASTM D790   |

| Impact                              | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-------------------------------------|-------------------------|--------------------|-------------|
| Notched Izod Impact (73°F (23°C))   | 1.0 ft·lb/in            | 53 J/m             | ASTM D256   |
| Unnotched Izod Impact (73°F (23°C)) | 5.5 ft·lb/in            | 290 J/m            | ASTM D4812  |
| Gardner Impact (73°F (23°C))        | 2.50 in·lb              | 0.282 J            | ASTM D5420  |

| Thermal                           | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------|-------------------------|--------------------|-------------|
| Deflection Temperature Under Load |                         |                    | ASTM D648   |
| 66 Psi (0.45 Mpa), Unannealed     | 315 °F                  | 157 °C             |             |
| 264 Psi (1.8 Mpa), Unannealed     | 285 °F                  | 141 °C             |             |

## Additional Information

The value listed as Unnotched Izod Impact, ASTM D256, was tested in accordance with ASTM D4812.

Filler Content, ASTM D2584: 40.5%

Testing and measurements were performed at 73 +/-3°F and 50 +/-5% relative humidity unless otherwise noted.

## Notes

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

