

## Technical Data Sheet



## Gapex RPP30EC22HB

Polypropylene Homopolymer  
LyondellBasell Industries  
Engineering Plastics

**Product Description**

GAPEX® HP RPP30EC22HB is a 30% Fiberglass Reinforced, Chemically Coupled High Performance Homopolymer Polypropylene

**General**

|                        |                                     |
|------------------------|-------------------------------------|
| Material Status        | • Commercial: Active                |
| Availability           | • North America                     |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight |
| Features               | • Chemically Coupled • Homopolymer  |
| Forms                  | • Pellets                           |

| Physical                                   | Nominal Value (English) | Nominal Value (SI)     | Test Method |
|--------------------------------------------|-------------------------|------------------------|-------------|
| Density / Specific Gravity                 | 1.14                    | 1.14 g/cm <sup>3</sup> | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)  | 5.5 g/10 min            | 5.5 g/10 min           | ASTM D1238  |
| Mechanical                                 | Nominal Value (English) | Nominal Value (SI)     | Test Method |
| Tensile Strength (Yield, 73°F (23°C))      | 10600 psi               | 73.1 MPa               | ASTM D638   |
| Tensile Elongation (Break, 73°F (23°C))    | 4.0 %                   | 4.0 %                  | ASTM D638   |
| Flexural Modulus - 1% Secant (73°F (23°C)) | 770000 psi              | 5310 MPa               | ASTM D790   |
| Flexural Strength                          | 16800 psi               | 116 MPa                | ASTM D790   |
| Impact                                     | Nominal Value (English) | Nominal Value (SI)     | Test Method |
| Notched Izod Impact (73°F (23°C))          | 1.5 ft·lb/in            | 80 J/m                 | ASTM D256   |
| Unnotched Izod Impact                      | 9.8 ft·lb/in            | 520 J/m                | ASTM D4812  |
| Gardner Impact                             | 3.50 in·lb              | 0.395 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              | 295 °F                  | 146 °C                 |             |

**Additional Information**

Filler Content, ASTM D2584: 31

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| Injection              | Nominal Value (English) | Nominal Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 160 to 180 °F           | 71 to 82 °C        |
| Drying Time            | 2.0 to 4.0 hr           | 2.0 to 4.0 hr      |
| Rear Temperature       | 430 to 460 °F           | 221 to 238 °C      |
| Middle Temperature     | 440 to 470 °F           | 227 to 243 °C      |
| Front Temperature      | 450 to 500 °F           | 232 to 260 °C      |
| Nozzle Temperature     | 450 to 500 °F           | 232 to 260 °C      |
| Processing (Melt) Temp | 430 to 460 °F           | 221 to 238 °C      |
| Mold Temperature       | 100 to 150 °F           | 38 to 66 °C        |
| Injection Rate         | Slow-Moderate           | Slow-Moderate      |
| Back Pressure          | 20.0 to 50.0 psi        | 0.138 to 0.345 MPa |
| Cushion                | 0.200 to 0.500 in       | 5.08 to 12.7 mm    |

## Notes

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

## Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

## Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

## Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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