

Technical Data Sheet

# Gapex RPP30EA18BK

Polypropylene Homopolymer  
LyondellBasell Industries  
Engineering Plastics

## Product Description

Primary use is for battery tray supports.

## General

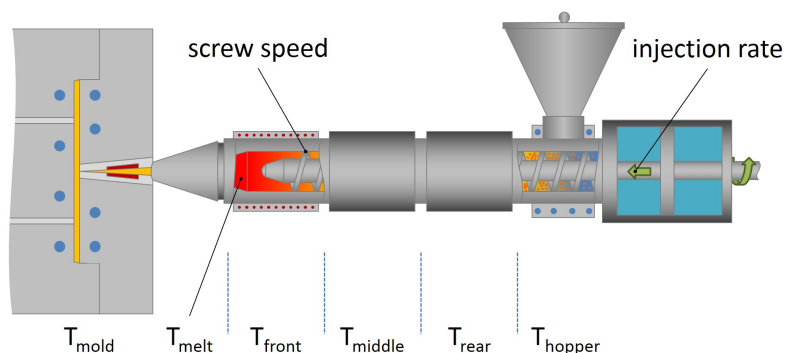
|                           |                                     |                                              |                      |
|---------------------------|-------------------------------------|----------------------------------------------|----------------------|
| Filler / Reinforcement    | • Glass Fiber, 30% Filler by Weight |                                              |                      |
| Additive                  | • Heat Stabilizer                   |                                              |                      |
| Features                  | • Chemically Coupled                | • Heat Stabilized                            |                      |
| Uses                      | • Support Trays                     |                                              |                      |
| Automotive Specifications | • ASTM D5857 PP114 G30 Z1           | • CHRYSLER MS-DB-500<br>CPN3580 Color: Black | • FORD WSB-M4D732-A3 |
| Appearance                | • Black                             |                                              |                      |
| Forms                     | • Pellets                           |                                              |                      |
| Processing Method         | • Injection Molding                 |                                              |                      |

| Physical                            | Nominal Value (English)   | Nominal Value (SI)     | Test Method |
|-------------------------------------|---------------------------|------------------------|-------------|
| Density / Specific Gravity          |                           |                        |             |
| --                                  | 1.13                      | 1.13 g/cm <sup>3</sup> | ASTM D792   |
| --                                  | 1.14 g/cm <sup>3</sup>    | 1.14 g/cm <sup>3</sup> | ISO 1183    |
| Melt Mass-Flow Rate (MFR)           |                           |                        |             |
| 230°C/2.16 Kg                       | 4.0 g/10 min              | 4.0 g/10 min           | ASTM D1238  |
| 230°C/2.16 Kg                       | 3.8 g/10 min              | 3.8 g/10 min           | ISO 1133    |
| Mechanical                          | Nominal Value (English)   | Nominal Value (SI)     | Test Method |
| Tensile Stress (Break)              | 10500 psi                 | 72.4 MPa               | ISO 527-2   |
| Tensile Elongation (Break)          | 4.0 %                     | 4.0 %                  | ASTM D638   |
| Flexural Modulus                    | 689000 psi                | 4750 MPa               | ASTM D790   |
| Impact                              | Nominal Value (English)   | Nominal Value (SI)     | Test Method |
| Notched Izod Impact                 |                           |                        |             |
| -40°F (-40°C)                       | 0.90 ft·lb/in             | 48 J/m                 | ASTM D256   |
| 73°F (23°C)                         | 1.2 ft·lb/in              | 65 J/m                 | ASTM D256   |
| -40°F (-40°C)                       | 2.3 ft·lb/in <sup>2</sup> | 4.8 kJ/m <sup>2</sup>  | ISO 180     |
| 73°F (23°C)                         | 3.2 ft·lb/in <sup>2</sup> | 6.8 kJ/m <sup>2</sup>  | ISO 180     |
| Unnotched Izod Impact (73°F (23°C)) | 10 ft·lb/in               | 530 J/m                | ASTM D4812  |
| Gardner Impact                      | 5.00 in·lb                | 0.565 J                | ASTM D3029  |
| Hardness                            | Nominal Value (English)   | Nominal Value (SI)     | Test Method |
| Durometer Hardness (Shore D)        | 95                        | 95                     | ASTM D2240  |
| Thermal                             | Nominal Value (English)   | Nominal Value (SI)     | Test Method |
| Deflection Temperature Under Load   |                           |                        |             |
| 66 Psi (0.45 Mpa), Unannealed       | 325 °F                    | 163 °C                 | ASTM D648   |
| 66 Psi (0.45 Mpa), Unannealed       | 306 °F                    | 152 °C                 | ISO 75-2/B  |
| 264 Psi (1.8 Mpa), Unannealed       | 300 °F                    | 149 °C                 | ASTM D648   |
| 264 Psi (1.8 Mpa), Unannealed       | 282 °F                    | 139 °C                 | ISO 75-2/A  |

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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.