

**Product Information**

Aug 2020

# Ultradur® B 4040 G6 BKQ29 15075

Polybutylene  
 Terephthalate/Polyethylene  
 Terephthalate (PBT/PET)


**Product Description**

Ultradur B 4040 G6 BKQ29 15075 is a 30% glass fiber reinforced PBT+PET, injection molding grade.

| PHYSICAL                               | ISO Test Method | Property Value |
|----------------------------------------|-----------------|----------------|
| Density, g/cm <sup>3</sup>             | 1183            | 1.55           |
| Viscosity Number, cm <sup>3</sup> /g   | 1628            | 98             |
| Moisture, %                            | 62              |                |
| (50% RH)                               |                 | 0.2            |
| (Saturation)                           |                 | 0.4            |
| MECHANICAL                             | ISO Test Method | Property Value |
| Tensile Modulus, MPa                   | 527             |                |
| 23C                                    |                 | 10,600         |
| Tensile stress at break, MPa           | 527             |                |
| 23C                                    |                 | 144            |
| Tensile strain at break, %             | 527             |                |
| 23C                                    |                 | 2.7            |
| Flexural Modulus, MPa                  | 178             |                |
| 23C                                    |                 | 9,100          |
| IMPACT                                 | ISO Test Method | Property Value |
| Izod Notched Impact, kJ/m <sup>2</sup> | 180             |                |
| 23C                                    |                 | 8.4            |
| Charpy Notched, kJ/m <sup>2</sup>      | 179             |                |
| 23C                                    |                 | 8              |
| Charpy Unnotched, kJ/m <sup>2</sup>    | 179             |                |
| 23C                                    |                 | 60             |
| THERMAL                                | ISO Test Method | Property Value |
| Melting Point, C                       | 3146            | 223            |
| HDT A, C                               | 75              | 202            |

**Processing Guidelines**
**Material Handling**

Max. Water content: 0.04%

To ensure optimum part performance, this product must be dried prior to molding and maintained at a moisture level of less than 0.04%. Dehumidifying or desiccant dryers operating at 100-120C (212-248F) for 4 hours drying time are recommended. Further information concerning safe handling procedures can be obtained from the Safety Data Sheet. Alternatively, please contact your BASF representative.

**Typical Profile**

Melt Temperature 250-270C (482-518F)

Mold Temperature 60-100C (140-212F)

Injection and Packing Pressure 35-125 bar (500-1500 psi)

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## Ultradur® B 4040 G6 BKQ29 15075



### Mold Temperatures

This product can be processed over mold temperatures of 60-100C (140-212F); however, for optimizing surface appearance, dimensional stability and part performance, mold surface temperatures of at least 80C (176F) are preferred.

### Pressures

Injection pressure controls the filling of the part and should be applied for 90% of ram travel. Packing pressure affects the final part and can be used effectively in controlling sink marks and shrinkage. It should be applied and maintained until the gate area is completely frozen off.

Back pressure can be utilized to provide uniform melt consistency and reduce trapped air and gas. A maximum of 10 bar (145 psi) is recommended due to the risk of excessive shear.

### Fill Rate

Fast fill rates are recommended to ensure uniform melt delivery to the cavity and prevent premature freezing. Surface appearance is directly affected by injection rate.

### Note

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