



# Ultradur® B 4406 G4 BK7110

BASF Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

## General Information

### Product Description

Ultradur B 4406 G4 BK7110 is an injection molding grade with 20 % glass fibers, pigmented black, for parts requiring enhanced fire resistance (eg relay housings, plug-and-socket connectors, switches, lighting components).

### Applications

Typical applications include relay housings, plug-and-socket connectors, switches, and lighting components.

### General

|                        |                                                               |
|------------------------|---------------------------------------------------------------|
| Material Status        | • Commercial: Active                                          |
| Availability           | • North America                                               |
| Filler / Reinforcement | • Glass Fiber, 20% Filler by Weight                           |
| Features               | • Flame Retardant                                             |
| Uses                   | • Connectors • Lighting Applications<br>• Housings • Switches |
| Agency Ratings         | • EC 1907/2006 (REACH)                                        |
| RoHS Compliance        | • RoHS Compliant                                              |
| Appearance             | • Black                                                       |
| Forms                  | • Pellets                                                     |
| Processing Method      | • Injection Molding                                           |

## ASTM & ISO Properties <sup>1</sup>

| Physical                                          | Nominal Value | Unit                  | Test Method |
|---------------------------------------------------|---------------|-----------------------|-------------|
| Density                                           | 1.55          | g/cm <sup>3</sup>     | ISO 1183    |
| Water Absorption (Saturation, 73°F)               | 0.40          | %                     | ISO 62      |
| Water Absorption (Equilibrium, 73°F, 50% RH)      | 0.20          | %                     | ISO 62      |
| Viscosity Number (Reduced Viscosity)              | 116.0         | ml/g                  | ISO 1628    |
| Mechanical                                        | Nominal Value | Unit                  | Test Method |
| Tensile Modulus (73°F)                            | 1.23E+6       | psi                   | ISO 527-2   |
| Tensile Stress (Break, 73°F)                      | 18900         | psi                   | ISO 527-2   |
| Tensile Strain (Break, 73°F)                      | 2.4           | %                     | ISO 527-2   |
| Impact                                            | Nominal Value | Unit                  | Test Method |
| Charpy Notched Impact Strength (73°F)             | 4.3           | ft·lb/in <sup>2</sup> | ISO 179     |
| Thermal                                           | Nominal Value | Unit                  | Test Method |
| Heat Deflection Temperature (264 psi, Unannealed) | 423           | °F                    | ISO 75-2/A  |
| Melting Temperature (DSC)                         | 433           | °F                    | ISO 3146    |

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.