



## Ultramid® B3WG3

BASF Corporation - Polyamide 6

Monday, November 4, 2019

### General Information

#### Product Description

Ultramid B3WG3 is a 15% glass fiber reinforced, heat stabilized injection molding PA6 grade.

#### General

|                        |                                         |
|------------------------|-----------------------------------------|
| Material Status        | • Commercial: Active                    |
| Availability           | • Asia Pacific • Europe • North America |
| Filler / Reinforcement | • Glass Fiber, 15% Filler by Weight     |
| Additive               | • Heat Stabilizer                       |
| Features               | • Heat Stabilized • Oil Resistant       |
| Agency Ratings         | • EC 1907/2006 (REACH)                  |
| RoHS Compliance        | • RoHS Compliant                        |
| Forms                  | • Pellets                               |
| Processing Method      | • Injection Molding                     |

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

| Physical                                          | Nominal Value | Unit                  | Test Method |
|---------------------------------------------------|---------------|-----------------------|-------------|
| Density                                           | 1.23          | g/cm <sup>3</sup>     | ISO 1183    |
| Mechanical                                        | Nominal Value | Unit                  | Test Method |
| Tensile Modulus (73°F)                            | 841000        | psi                   | ISO 527-2   |
| Tensile Stress (Break, 73°F)                      | 18900         | psi                   | ISO 527-2   |
| Tensile Strain (Break, 73°F)                      | 3.5           | %                     | ISO 527-2   |
| Flexural Modulus (73°F)                           | 783000        | psi                   | ISO 178     |
| Impact                                            | Nominal Value | Unit                  | Test Method |
| Charpy Notched Impact Strength                    |               |                       | ISO 179     |
| -22°F                                             | 2.9           | ft·lb/in <sup>2</sup> |             |
| 73°F                                              | 3.3           | ft·lb/in <sup>2</sup> |             |
| Charpy Unnotched Impact Strength (73°F)           | 19            | ft·lb/in <sup>2</sup> | ISO 179     |
| Notched Izod Impact Strength (73°F)               | 2.7           | ft·lb/in <sup>2</sup> | ISO 180     |
| Thermal                                           | Nominal Value | Unit                  | Test Method |
| Heat Deflection Temperature (264 psi, Unannealed) | 374           | °F                    | ISO 75-2/A  |
| Melting Temperature (DSC)                         | 428           | °F                    | ISO 3146    |
| RTI Elec                                          |               |                       | UL 746      |
| 0.031 in                                          | 266           | °F                    |             |
| 0.06 in                                           | 266           | °F                    |             |
| 0.12 in                                           | 266           | °F                    |             |
| RTI Imp                                           |               |                       | UL 746      |
| 0.06 in                                           | 185           | °F                    |             |
| 0.12 in                                           | 185           | °F                    |             |
| RTI Str                                           |               |                       | UL 746      |
| 0.06 in                                           | 266           | °F                    |             |
| 0.12 in                                           | 266           | °F                    |             |

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| Flammability | Nominal Value | Unit | Test Method |
|--------------|---------------|------|-------------|
| Flame Rating |               |      | UL 94       |
| 0.031 in     |               | HB   |             |
| 0.06 in      |               | HB   |             |
| 0.12 in      |               | HB   |             |

| Processing Information |               |      |  |
|------------------------|---------------|------|--|
| Injection              | Nominal Value | Unit |  |
| Drying Temperature     | 176           | °F   |  |
| Drying Time            | 2.0 to 4.0    | hr   |  |
| Suggested Max Moisture | 0.15          | %    |  |
| Processing (Melt) Temp | 482 to 554    | °F   |  |
| Mold Temperature       | 176 to 203    | °F   |  |
| Injection Pressure     | 508 to 1810   | psi  |  |
| Injection Rate         | Fast          |      |  |

### Notes

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