

## BASF Ultramid® B3WG6 30% Glass Filled PA6 (Conditioned)

Category : Polymer , Thermoplastic , Nylon , Nylon 6

### Material Notes:

Ultramid B3WG6 is a 30% glass fiber reinforced, heat stabilized injection molding PA6 grade.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_BASF-Ultramid-B3WG6-30-Glass-Filled-PA6-Conditioned.php](http://www.lookpolymers.com/polymer_BASF-Ultramid-B3WG6-30-Glass-Filled-PA6-Conditioned.php)

| Physical Properties                | Metric  | English   | Comments                  |
|------------------------------------|---|---|---------------------------|
| Density                            | 1.36 g/cc   | 0.0491 lb/in <sup>3</sup>                           | ISO 1183                  |
| Water Absorption                   | 6.3 - 6.9 %   | 6.3 - 6.9 %   | ISO 62                    |
| Moisture Absorption at Equilibrium | 1.9 - 2.3 %   | 1.9 - 2.3 %   | (23°C/50% R.H.); ISO 62   |
| Viscosity Test                     | 140 cm <sup>3</sup> /g                              | 140 cm <sup>3</sup> /g                              | Viscosity number; ISO 307 |
| Linear Mold Shrinkage              | 0.0035 cm/cm  | 0.0035 in/in  |                           |
| Melt Flow                          | 68 g/10 min<br>@Load 5.00 kg,<br>Temperature 275 °C | 68 g/10 min<br>@Load 11.0 lb,<br>Temperature 527 °F | ISO 1133                  |

| Mechanical Properties      | Metric                 | English                    | Comments          |
|----------------------------|------------------------|----------------------------|-------------------|
| Tensile Strength, Yield    | 115 MPa                | 16700 psi                  | 50mm/min; ISO 527 |
| Elongation at Yield        | 8.0 %                  | 8.0 %                      | 50mm/min; ISO 527 |
| Flexural Strength          | 180 MPa                | 26100 psi                  | ISO 178           |
| Flexural Modulus           | 5.00 GPa               | 725 ksi                    | ISO 178           |
| Izod Impact, Notched (ISO) | 20.0 kJ/m <sup>2</sup> | 9.52 ft-lb/in <sup>2</sup> | ISO 180/A         |
| Charpy Impact Unnotched    | 11.0 J/cm <sup>2</sup> | 52.4 ft-lb/in <sup>2</sup> | ISO 179/1eU       |
| Charpy Impact, Notched     | 3.00 J/cm <sup>2</sup> | 14.3 ft-lb/in <sup>2</sup> | ISO 179/1eA       |

| Thermal Properties               | Metric      | English                            | Comments   |
|----------------------------------|-------------|------------------------------------|--|
| Specific Heat Capacity           | 1.50 J/g-°C | 0.359 BTU/lb-°F                    |  |
| Thermal Conductivity             | 0.360 W/m-K | 2.50 BTU-in/hr-ft <sup>2</sup> -°F | DIN 52612  |
| Melting Point                    | 220 °C      | 428 °F                             | DIN 53765  |
| Maximum Service Temperature, Air | 145 °C      | 293 °F                             | for 50% loss of tensile strength after 20,000 hr |

| Thermal Properties | 175 °C<br>Metric | 347 °F<br>English | for 50% loss of tensile strength after<br>5000 hr |
|--------------------|------------------|-------------------|---|
|                    | 200 °C           | 392 °F            |   |

| Electrical Properties      | Metric                           | English                          | Comments                   |
|----------------------------|----------------------------------|----------------------------------|----------------------------|
| Volume Resistivity         | 1.00e+10 ohm-cm                  | 1.00e+10 ohm-cm                  | IEC 60093                  |
| Surface Resistance         | 1.00e+10 ohm                     | 1.00e+10 ohm                     | IEC 60093                  |
| Dielectric Constant        | 6.8<br>@Frequency 1.00e+6<br>Hz  | 6.8<br>@Frequency 1.00e+6<br>Hz  | IEC 60250                  |
| Dissipation Factor         | 0.22<br>@Frequency 1.00e+6<br>Hz | 0.22<br>@Frequency 1.00e+6<br>Hz | IEC 60250                  |
| Comparative Tracking Index | 450 V                            | 450 V                            | Test Solution A; IEC 60112 |

| Processing Properties | Metric         | English      | Comments                    |
|-----------------------|----------------|--------------|-----------------------------|
| Melt Temperature      | 270 - 290 °C   | 518 - 554 °F | Injection-molding/Extrusion |
| Mold Temperature      | 80.0 - 90.0 °C | 176 - 194 °F | Injection-molding           |

| Descriptive Properties       | Value                             | Comments |
|------------------------------|-----------------------------------|----------|
| Color                        | Natural                           |          |
| Commercial Status            | North America and Europe          |          |
| Form                         | Pellets                           |          |
| Impact Modified              | No                                |          |
| Primary Processing Technique | Injection Molding                 |          |
| Processing                   | Injection Molding                 |          |
| Special characteristic       | Heat stabilized or stable to heat |          |

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China