

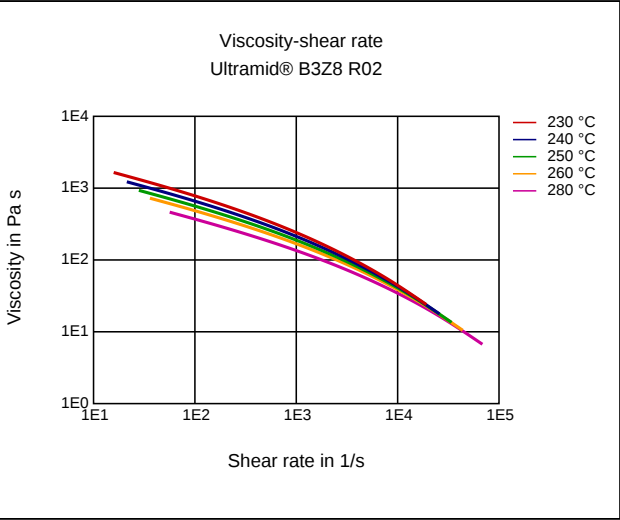
**Ultramid® B3Z8 R02**  
PA6-I

BASF

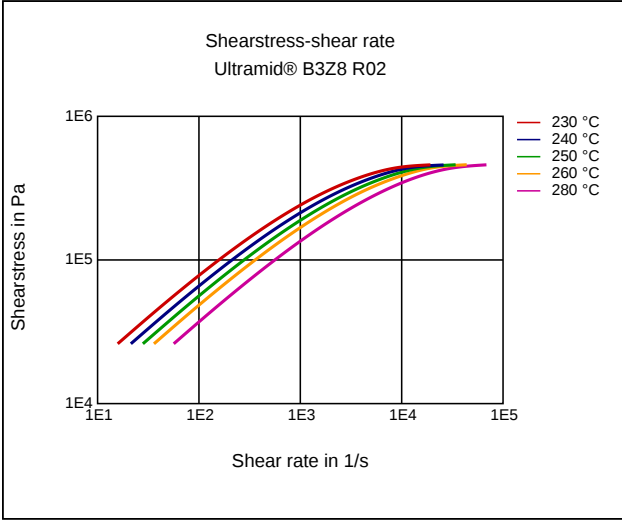
| Rheological properties                      | dry / cond          | Unit      | Test Standard       |
|---------------------------------------------|---------------------|-----------|---------------------|
| <b>ISO Data</b>                             |                     |           |                     |
| Melt volume-flow rate, MVR                  | 47 / *              | cm³/10min | ISO 1133            |
| Temperature                                 | 275 / *             | °C        | -                   |
| Load                                        | 5 / *               | kg        | -                   |
| Molding shrinkage, parallel                 | 1.1 / *             | %         | ISO 294-4, 2577     |
| Molding shrinkage, normal                   | 1.0 / *             | %         | ISO 294-4, 2577     |
| <b>Mechanical Properties</b>                |                     |           |                     |
| <b>ISO Data</b>                             |                     |           |                     |
| Tensile Modulus                             | 1040 / 355          | MPa       | ISO 527             |
| Impact Strength (Charpy), +23°C             | no break / no break | kJ/m²     | ISO 179/1eU         |
| Impact Strength (Charpy), -30°C             | no break / no break | kJ/m²     | ISO 179/1eU         |
| Notched Impact Strength (Charpy), +23°C     | 88 / no break       | kJ/m²     | ISO 179/1eA         |
| Notched Impact Strength (Charpy), -30°C     | 16 / 14             | kJ/m²     | ISO 179/1eA         |
| <b>Thermal Properties</b>                   |                     |           |                     |
| <b>ISO Data</b>                             |                     |           |                     |
| Melting Temperature (10°C/min)              | 220 / *             | °C        | ISO 11357-1/-3      |
| Temp. of deflection under load (1.80 MPa)   | 48 / *              | °C        | ISO 75-1/-2         |
| Temp. of deflection under load (0.45 MPa)   | 60 / *              | °C        | ISO 75-1/-2         |
| Coeff. of Linear Therm. Expansion, parallel | 146 / *             | E-6/K     | ISO 11359-1/-2      |
| Coeff. of Linear Therm. Expansion, normal   | 178 / *             | E-6/K     | ISO 11359-1/-2      |
| <b>Electrical Properties</b>                |                     |           |                     |
| <b>ISO Data</b>                             |                     |           |                     |
| Relative permittivity, 1MHz                 | 3 / 3.2             | -         | IEC 62631-2-1       |
| Dissipation Factor, 1MHz                    | 0.0147 / 0.0566     | E-4       | IEC 62631-2-1       |
| Volume Resistivity                          | 1.1E12 / -          | Ohm*m     | IEC 62631-3-1       |
| Surface Resistivity                         | * / 9E13            | Ohm       | IEC 62631-3-2       |
| Comparative tracking index                  | - / 600             | -         | IEC 60112           |
| <b>Other Properties</b>                     |                     |           |                     |
| <b>ISO Data</b>                             |                     |           |                     |
| Water Absorption                            | 5.75 / *            | %         | Sim. to ISO 62      |
| Humidity absorption                         | 1.9 / *             | %         | Sim. to ISO 62      |
| Density                                     | 1030 / -            | kg/m³     | ISO 1183            |
| <b>Material Specific Properties</b>         |                     |           |                     |
| <b>ISO Data</b>                             |                     |           |                     |
| Viscosity number                            | 129 / *             | cm³/g     | ISO 307, 1157, 1628 |
| <b>Test specimen production</b>             |                     |           |                     |
| <b>ISO Data</b>                             |                     |           |                     |
| Injection Molding, melt temperature         | 260                 | °C        | ISO 294             |
| Injection Molding, mold temperature         | 40                  | °C        | ISO 294             |

Diagrams

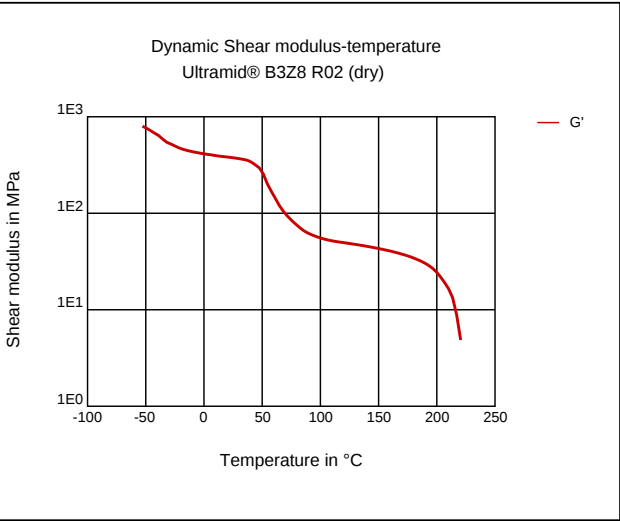
Viscosity-shear rate



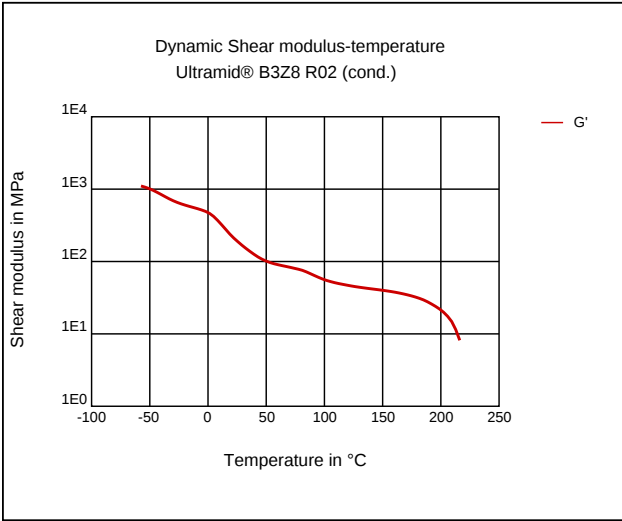
Shearstress-shear rate



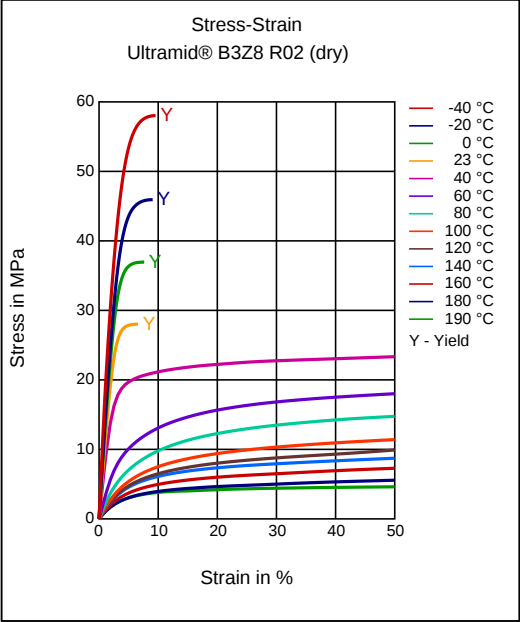
Dynamic Shear modulus-temperature



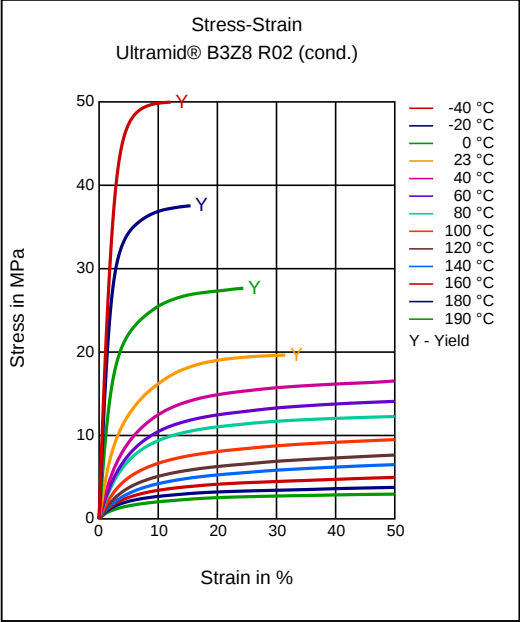
Dynamic Shear modulus-temperature



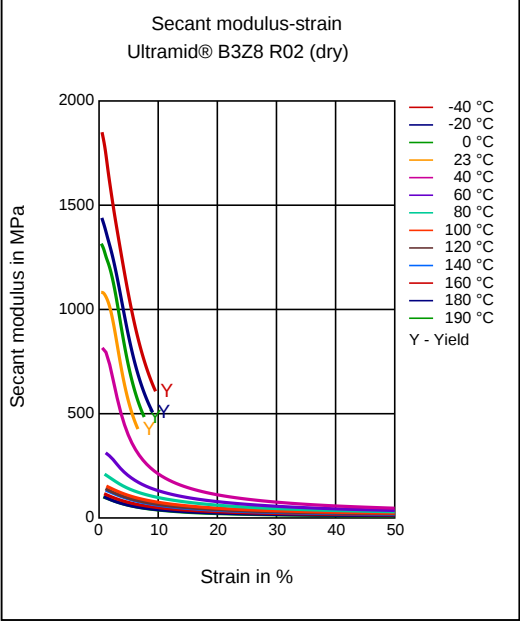
Stress-strain



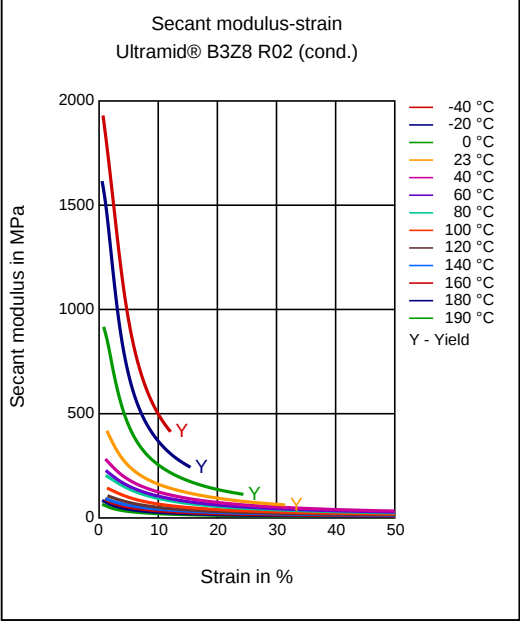
Stress-strain



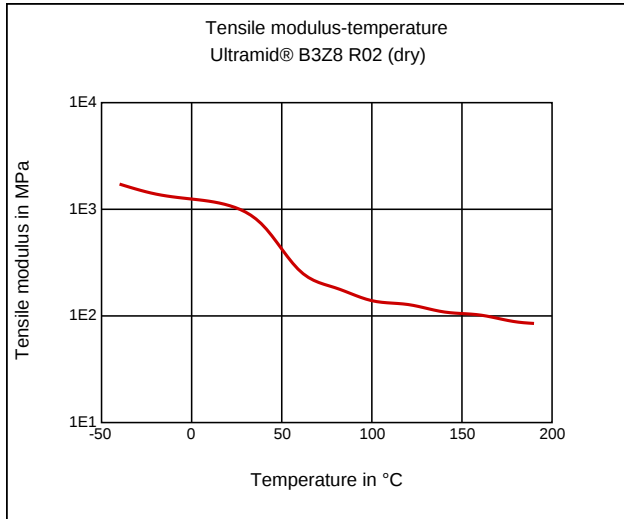
Secant modulus-strain



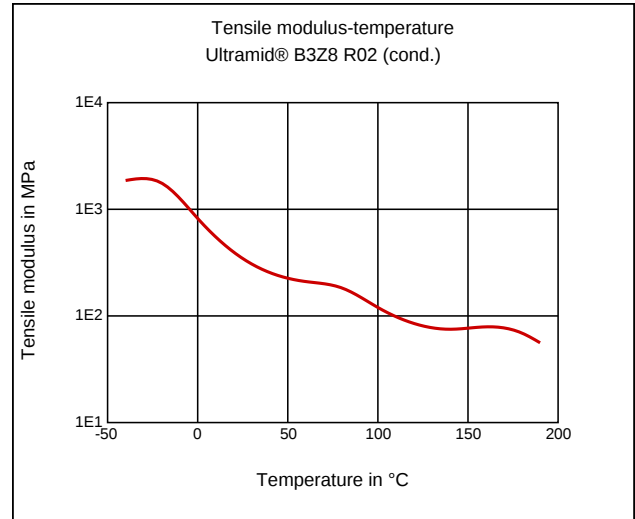
Secant modulus-strain



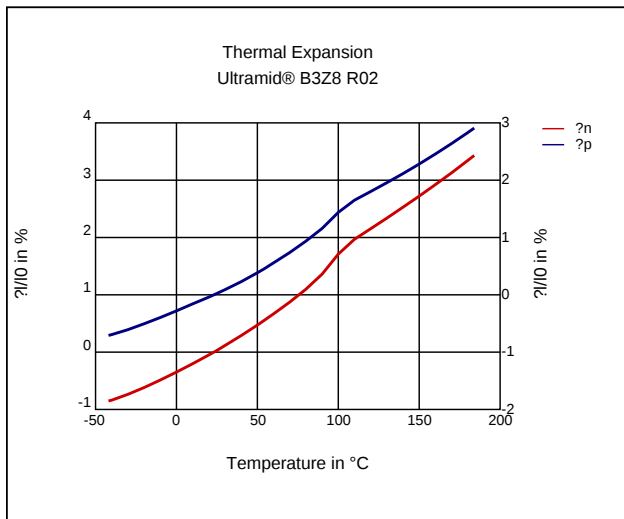
#### Tensile Modulus-Temperature



#### Tensile Modulus-Temperature



#### Coeff. of linear thermal expansion, normal



#### Characteristics

##### Processing

Injection Molding

##### Delivery form

Pellets

##### Film Extrusion

##### PREPROCESSING

Pre/Post-processing, max. allowed water content: .15 %

Pre/Post-processing, Pre-drying, Temperature: 80 °C

Pre/Post-processing, Pre-drying, Time: 4 h

##### PROCESSING

Extrusion, Flat film, Melt temperature: 240 - 260 °C

##### Special Characteristics

Impact modified

#### Disclaimer

#### Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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