

## Technical Data

### General

|                           |   |  |  |
|---------------------------|---|--|--|
| Material Status           | • Commercial: Active  |  |  |
| Literature <sup>1</sup>   | • <a href="#">Technical Datasheet (English)</a>   |  |  |
| Search for UL Yellow Card | • <a href="#">Styrolution</a><br>• <a href="#">Terluran®</a>  |  |  |
| Availability              | • Africa & Middle East<br>• Asia Pacific  | • Central America<br>• Europe  | • North America<br>• South America       |
| Forms                     | • Pellets   |  |  |
| Multi-Point Data          | • Creep Modulus vs. Time (ISO 11403-1)<br>• Isochronous Stress vs. Strain (ISO 11403-1)<br>• Isothermal Stress vs. Strain (ISO 11403-1) | • Secant Modulus vs. Strain (ISO 11403-1)<br>• Shear Modulus vs. Temperature (ISO 11403-1)<br>• Specific Volume vs Temperature (ISO 11403-2) | • Viscosity vs. Shear Rate (ISO 11403-2) |

| Physical                                  | Nominal Value Unit          | Test Method |
|---|-----------------------------|-------------|
| Density                                   | 1.04 g/cm <sup>3</sup>      | ISO 1183    |
| Melt Mass-Flow Rate (MFR) (220°C/10.0 kg) | 20 g/10 min                 | ISO 1133    |
| Melt Volume-Flow Rate (MVR)               |                             | ISO 1133    |
| 200°C/5.0 kg                              | 1.50 cm <sup>3</sup> /10min |             |
| 220°C/10.0 kg                             | 19.0 cm <sup>3</sup> /10min |             |
| Molding Shrinkage                         | 0.40 to 0.70 %              | ISO 294-4   |
| Water Absorption (Saturation, 23°C)       | 1.0 %                       | ISO 62      |

| Mechanical                   | Nominal Value Unit | Test Method |
|------------------------------|--------------------|-------------|
| Tensile Modulus              | 2300 MPa           | ISO 527-2   |
| Tensile Stress (Yield, 23°C) | 45.0 MPa           | ISO 527-2   |
| Tensile Strain (Yield, 23°C) | 2.6 %              | ISO 527-2   |
| Flexural Strength            | 65.0 MPa           | ISO 178     |

| Films                           | Nominal Value Unit | Test Method |
|---------------------------------|--------------------|-------------|
| Tensile Elongation - MD (Break) | 10 %               | No Standard |

| Impact                           | Nominal Value Unit    | Test Method |
|----------------------------------|-----------------------|-------------|
| Charpy Notched Impact Strength   |                       | ISO 179     |
| -30°C                            | 8.0 kJ/m <sup>2</sup> |             |
| 23°C                             | 22 kJ/m <sup>2</sup>  |             |
| Charpy Unnotched Impact Strength |                       | ISO 179     |
| -30°C                            | 130 kJ/m <sup>2</sup> |             |
| 23°C                             | 170 kJ/m <sup>2</sup> |             |
| Notched Izod Impact <sup>3</sup> |                       | ISO 180     |
| -30°C, 4.00 mm                   | 8.0 J/m               |             |
| 23°C, 4.00 mm                    | 25 J/m                |             |

| Hardness                  | Nominal Value Unit | Test Method |
|---------------------------|--------------------|-------------|
| Ball Indentation Hardness | 97.0 MPa           | ISO 2039-1  |

| Thermal                     | Nominal Value Unit           | Test Method  |
|-----------------------------|------------------------------|--------------|
| Heat Deflection Temperature |                              |              |
| 0.45 MPa, Annealed          | 92.0 °C                      | ISO 75-2/Bf  |
| 1.8 MPa, Annealed           | 80.0 °C                      | ISO 75-2/Af  |
| Vicat Softening Temperature |                              |              |
| --                          | 105 °C                       | ISO 306/B50  |
| --                          | 96.0 °C                      | ISO 306/B120 |
| CLTE - Flow                 | 0.000080 to 0.00011 cm/cm/°C | ISO 11359-2  |
| Thermal Conductivity        | 0.17 W/m/K                   | DIN 52612    |

| Electrical                   | Nominal Value Unit | Test Method |
|------------------------------|--------------------|-------------|
| Surface Resistivity          | 1.0E+13 ohm        | IEC 60093   |
| Volume Resistivity           | 1.0E+15 ohm·cm     | IEC 60093   |
| Dielectric Constant (100 Hz) | 2.90               | IEC 60250   |
| Dissipation Factor           |                    | IEC 60250   |
| 100 Hz                       | 0.0048             |             |
| 1 MHz                        | 0.0079             |             |

| Optical          | Nominal Value Unit | Test Method |
|------------------|--------------------|-------------|
| Yellowness Index | 13 YI              | ASTM D1925  |

| Injection              | Nominal Value Unit |
|------------------------|--------------------|
| Drying Temperature     | 80.0 °C            |
| Drying Time            | 2.0 to 4.0 hr      |
| Processing (Melt) Temp | 220 to 260 °C      |
| Mold Temperature       | 60.0 °C            |

**Injection Notes**

Injection Velocity: 200 mm/s

**Notes**

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> 0.25 mm Notch Radius

## Where to Buy

### Supplier

#### Styrolution

Wyandotte, MI USA  
**Telephone:** 734-324-6100  
**Web:** <http://www.styrolution.com/>

### Distributor

#### Amco Polymers LLC

**Telephone:** 800-262-6685  
**Web:** <http://www.amco.ws/>  
**Availability:** North America

#### Channel Prime Alliance

**Telephone:** 800-247-8038  
**Web:** <http://www.channelpa.com/>  
**Availability:** North America

#### Entec Polymers

**Telephone:** 800-375-5440  
**Web:** <http://www.entecpolymers.com/>  
**Availability:** North America

#### GAZECHIM PLASTIQUES

*GAZECHIM PLASTIQUES is a Pan European distribution company. Contact GAZECHIM PLASTIQUES for availability of individual products by country.*

**Telephone:** +33-4-67-49-55-37  
**Web:** <http://www.gazechim.com/>  
**Availability:** France

#### M. Holland Canada Company

**Telephone:** 905-665-1168  
**Web:** <http://www.mholland.com/>  
**Availability:** Canada

#### M. Holland Company

**Telephone:** 855-497-1403  
**Web:** <http://www.mholland.com/>  
**Availability:** Mexico, United States

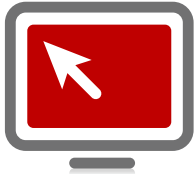
#### Ultrapolymers

*Ultrapolymers is a Pan European distribution company. Contact Ultrapolymers for availability of individual products by country.*

**Telephone:** +32-11-57-95-57  
**Web:** <http://www.ultrapolymers.com/>  
**Availability:** Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Denmark, Estonia, Finland, Germany, Ireland, Italy, Latvia, Lithuania, Macedonia, Norway, Portugal, Serbia, Slovakia, Slovenia, Spain, Sweden, Turkey, United Kingdom



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– Birgit Elvardt Bader, Production Manager, Micotron

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– Kevin Chase, Owner & President, Chase Plastics



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