

## Technical Specs

| Property                             | ASTM | Metric                         | English                          |
|--------------------------------------|------|--------------------------------|----------------------------------|
| <b>General</b>                       |      |                                |                                  |
| Hardness Rockwell M                  |      | 111                            | 111                              |
| Specific Gravity                     | D792 | 1.42                           | 1.42                             |
| Water Absorption                     |      |                                |                                  |
| 24 Hrs @ RT                          | D570 | 0.53 %                         | 0.53 %                           |
| 48 Hrs @ 122°F                       | D570 | 1.14 %                         | 1.14 %                           |
| <b>Mechanical</b>                    |      |                                |                                  |
| Compressive Modulus                  |      |                                |                                  |
| 500°F                                | D695 | 876 MPa                        | 1.27 x 10 <sup>5</sup> psi       |
| RT                                   | D695 | 2.7 GPa                        | 3.93 x 10 <sup>5</sup> psi       |
| Elongation                           |      |                                |                                  |
| 500°F                                | D638 | 8.2 %                          | 8.2 %                            |
| RT                                   | D638 | 4.8 %                          | 4.8 %                            |
| Flexural Modulus                     |      |                                |                                  |
| 500°F                                | D790 | 2.3 GPa                        | 3.39 x 10 <sup>5</sup> psi       |
| RT                                   | D790 | 3.6 GPa                        | 5.33 x 10 <sup>5</sup> psi       |
| Flexural Strength                    |      |                                |                                  |
| 500°F                                | D790 | 60 MPa                         | 8,700 psi                        |
| RT                                   | D790 | 129 MPa                        | 18,700 psi                       |
| Izod Impact Strength                 |      |                                |                                  |
| (notched) RT                         | D256 | 32 J/m                         | 0.6 ft-lb/in                     |
| (unnotched) RT                       | D256 | 226.3 J/m                      | 4.24 ft-lb/in                    |
| Tensile Modulus                      |      |                                |                                  |
| 500°F                                | D638 | 1.5 GPa                        | 218,000 psi                      |
| RT                                   | D638 | 1.9 GPa                        | 286,000 psi                      |
| Tensile Strength                     |      |                                |                                  |
| 500°F                                | D638 | 37 MPa                         | 5,400 psi                        |
| RT                                   | D638 | 65.5 MPa                       | 9,500 psi                        |
| <b>Thermal</b>                       |      |                                |                                  |
| Coefficient of Thermal Expansion     | D696 | 41.33 x 10 <sup>-6</sup> m/m°C | 22.9 x 10 <sup>-6</sup> in/in/°F |
| Deformation 2000 psi, 24 hrs, RT     | D621 | 0.1%                           | 0.1%                             |
| Heat Deflection Temperature, 264 psi | D648 | 299°C                          | 570°F                            |

**Note:** The table above represents typical values, intended for reference only. They should NOT be used as a basis for design specifications or quality control. Meldin<sup>®</sup> is a registered trademark of Saint-Gobain Performance Plastics Corporation.

## Product Description

**Meldin<sup>®</sup> 6021** is an excellent multi-purpose, wear resistant material that is suitable for bearing, thrust washer, and piston ring applications. Uses graphite as the primary internal lubricant.

For more information on this material contact TriStar Plastics Corp. at 1-800-TRISTAR or via our website at [www.tstar.com](http://www.tstar.com).