

# T60-500-119 Polyethylene Homopolymer

T60-500-119 is a high density polyethylene homopolymer designed specifically for injection molding. This narrow molecular weight distribution resin is a product of INEOS USA, LLC's innovative technology. Parts fabricated from this material exhibit a glossy surface finish and good impact strength and rigidity. This material meets the Food and Drug Administration requirements of 21 CFR 177.1520.

## Typical Properties<sup>1</sup>

|  | Values         |                        | ASTM Method |
|--|----------------|------------------------|-------------|
|  | English Units  | SI Units               |             |
| <b>Resin</b>                                 |                |                        |             |
| Density                                      | —              | 0.9608 g/cc            | D4883       |
| Melt Index 190 C/2.16 kg                     | —              | 6.5 g/10 min           | D1238       |
| <b>Compression Molded Sample</b>             |                |                        |             |
| <b>Tensile Strength (2 in/min)</b>           |                |                        | D638        |
| @ Yield                                      | 4,660 psi      | 32.2 MPa               |             |
| @ Break                                      | 3,163 psi      | 21.8 MPa               |             |
| <b>Elongation (2 in/min)</b>                 |                |                        | D638        |
| @ Yield                                      | 8.0 %          | 8.0 %                  |             |
| @ Break                                      | 1276 %         | 1276 %                 |             |
| <b>Flexural Modulus</b>                      |                |                        | D790A       |
| Tangent Method                               | 247,000 psi    | 1,705 MPa              |             |
| <b>Notched Izod Impact Strength</b>          | 0.80 ft-lbf/in | 4.21 kJ/m <sup>2</sup> | D256        |
| <b>Hardness</b>                              |                |                        | D2240       |
| Shore D                                      | 65             | 65                     |             |
| <b>Vicat Softening Point</b>                 | 264 F          | 129 C                  | D1525       |
| <b>Brittleness Temperature</b>               | <-94 F         | <-70 C                 | D746        |
| <b>Heat Deflection Temperature</b>           |                |                        | D648        |
| @ 66 psi (455 kPa)                           | 181 F          | 83 C                   |             |
| <b>Environmental Stress Crack Resistance</b> |                |                        | D1693       |
| Condition B, 100% Igepal, F50 (hrs.)         | 4              | 4                      |             |

<sup>1</sup> Typical properties will vary and are not to be used for specification purposes.