

**ColorRx® TPEU9500-65D-RX**
*Americhem - Thermoplastic Polyurethane Elastomer*
**General Information**
**Product Description**

TPEU9500-65D-RX is an injection molding grade of aromatic polyether-based thermoplastic polyurethane (TPU) with Shore-D hardness of 65. Suitable for healthcare applications.

**General**

|                   |  |   |                          |
|-------------------|--|---|--------------------------|
| Material Status   | • Commercial: Active                     |   |                          |
| Availability      | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• Latin America                               | • North America          |
| Features          | • Biocompatible<br>• E-beam Sterilizable | • Ethylene Oxide Sterilizable<br>• Excellent Colorability | • Radiation Sterilizable |
| Uses              | • Engineering Parts                      | • Medical/Healthcare Applications                         | • Surgical Instruments   |
| Agency Ratings    | • ISO 10993                              | • USP Class VI  |                          |
| Forms             | • Pellets                                |   |                          |
| Processing Method | • Injection Molding                      |   |                          |

**Properties <sup>1</sup>**

| Physical                              | Nominal Value    | Unit  | Test Method |
|---------------------------------------|------------------|-------|-------------|
| Density / Specific Gravity            | 1.17             |       | ASTM D792   |
| Molding Shrinkage - Flow              | 7.0E-3 to 9.0E-3 | in/in | ASTM D955   |
| Mechanical                            | Nominal Value    | Unit  | Test Method |
| Flexural Modulus <sup>2</sup>         | 32000            | psi   | ASTM D790   |
| Elastomers                            | Nominal Value    | Unit  | Test Method |
| Tensile Strength <sup>2</sup> (Break) | 6460             | psi   | ASTM D412   |
| Tensile Elongation (Break)            | 450              | %     | ASTM D412   |
| Hardness                              | Nominal Value    | Unit  | Test Method |
| Durometer Hardness (Shore D)          | 62               |       | ASTM D2240  |

**Processing Information**

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 210 to 230    | °F   |
| Drying Time            | 2.0 to 4.0    | hr   |
| Rear Temperature       | 380 to 410    | °F   |
| Middle Temperature     | 390 to 420    | °F   |
| Front Temperature      | 400 to 430    | °F   |
| Nozzle Temperature     | 410 to 440    | °F   |
| Processing (Melt) Temp | 410 to 440    | °F   |
| Mold Temperature       | 60 to 140     | °F   |

**Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 in/min

