

**Arnitel® EL150**
*Envalior - Thermoplastic Copolyester Elastomer*
**General Information**
**Product Description**

Injection Molding

Arnitel EL150 is a very low modulus grade with nominal hardness of 20D. Material can be processed by many conventional thermoplastics processing techniques such as injection molding. It is important to note that in a certain periods, clumps can be formed due to excessive storage conditions such as packing type, stacking, extreme temperature. Pl. refer injection molding recommendations Food contact use - Not Applicable.

**General**

|                   |  |
|-------------------|--|
| Material Status   | • Commercial: Active   |
| Availability      | • Africa & Middle East<br>• Asia Pacific<br>• Europe<br>• Latin America<br>• North America |
| Processing Method | • Injection Molding  |
| Resin ID          | • TPC-ET   |

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

| Physical                                     | Nominal Value | Unit                   | Test Method      |
|--|---------------|------------------------|------------------|
| Density                                      | 1.06          | g/cm <sup>3</sup>      | ISO 1183         |
| Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)  | 76            | cm <sup>3</sup> /10min | ISO 1133         |
| Molding Shrinkage                            |               |                        | ISO 294-4        |
| Across Flow                                  | 1.0           | %                      |                  |
| Flow   | 0.70          | %                      |                  |
| Water Absorption (24 hr, 73°F)               | 1.8           | %                      | ISO 62           |
| Water Absorption (Equilibrium, 73°F, 50% RH) | 0.12          | %                      | ISO 62           |
| Viscosity Number                             | 3.32          | cm <sup>3</sup> /g     | ISO 307          |
| Mechanical                                   | Nominal Value | Unit                   | Test Method      |
| Tensile Modulus                              | 2320          | psi                    | ISO 527-1        |
| Tensile Stress (Break)                       | 2090          | psi                    | ISO 527-2        |
| Tensile Stress                               |               |                        | ISO 527-2        |
| 5.0% Strain                                  | 116           | psi                    |                  |
| 10% Strain                                   | 203           | psi                    |                  |
| 50% Strain                                   | 450           | psi                    |                  |
| 100% Strain                                  | 551           | psi                    |                  |
| Tensile Strain (Break)                       | > 300         | %                      | ISO 527-2        |
| Nominal Tensile Strain at Break              | 980           | %                      | ISO 527-2        |
| Hardness                                     | Nominal Value | Unit                   | Test Method      |
| Shore Hardness                               |               |                        | ISO 868          |
| Shore A, 3 sec                               | 80            |                        |                  |
| Shore A, 15 sec                              | 79            |                        |                  |
| Shore D, 3 sec                               | 19            |                        |                  |
| Shore D, 15 sec                              | 18            |                        |                  |
| Thermal                                      | Nominal Value | Unit                   | Test Method      |
| Glass Transition Temperature <sup>2</sup>    | -90.4         | °F                     | ASTM D5026/D7028 |
| Melting Temperature <sup>3</sup>             | 329           | °F                     | ISO 11357-3      |
| RTI Elec (0.05 in)                           | 122           | °F                     | UL 746B          |
| RTI Imp (0.05 in)                            | 122           | °F                     | UL 746B          |
| RTI Str (0.05 in)                            | 122           | °F                     | UL 746B          |

