UNISOFT TPE™ ST-50A-BK-3-01

DESCRIPTION
TPE Compound based on Styrene-Ethylene/Butylene-Styrene Block Copolymer

FEATURES
Standard grade with adhesion to Polypropylene, low hardness; excellent processing;

APPLICATIONS
Unisoft TPE™ ST-50A-BK-3-01 is a general grade intended for use in injection molding. Can be used for applications in the Electronic & Automotive industry.

COLOR
Black color (about RAL 9005)

SUPPLIER
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<tr>
<th>MECHANICAL PROPERTIES</th>
<th>TEST METHOD</th>
<th>ENGLISH - UNITS</th>
<th>S I - UNITS</th>
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<tr>
<td>SHORE HARDNESS</td>
<td>ASTM D - 2240</td>
<td>50 A</td>
<td>50 A</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>ASTM D - 792</td>
<td>1.18 ( g / cc )</td>
<td>1.18 ( g / cc )</td>
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<tr>
<td>TENSILE STRENGTH</td>
<td>ASTM D - 412</td>
<td>725 ( psi )</td>
<td>5.0 ( Mpa )</td>
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<tr>
<td>ELONGATION AT BREAK</td>
<td>ASTM D - 412</td>
<td>625 ( % )</td>
<td>625 ( % )</td>
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PROCESSING INFORMATION

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Injection Molding (preferable standard 2-component injection molding machine to get adhesion to substrate), Extrusion

PURGING
Purge thoroughly before and after use of this product (e.g. Polypropylene with MFI between 0.5 – 2.5)

DRYING TIME
Material is not hygroscopic and drying is only necessary if material was stored under moisture.

COLORING
Material is already pre-colored.

SHRINKAGE PROPERTIES
Unisoft TPE™ grades are anisotropic materials. Their shrinkage properties are higher in the flow direction, and the shrinkage in the cross-flow direction is less. Unisoft TPE™ ST-50A-BK-3-01 shows shrinkage values between 1.0–2.9 %.

RHEOLOGICAL PROPERTIES
Actual rheological data of Unisoft TPE™ materials are shear dependence. Viscosity will decrease at higher shear rates, and should be considered during injection molding design and setup of processing conditions.

MOLDING TEMPERATURES

| Rear       | 320 - 355 °F | 160 - 180 °C |
| Front      | 355 - 395 °F | 180 - 200 °C |
| Nozzle     | 395 - 420 °F | 200 - 215 °C |
| Mold       | 85 - 150 °F  | 30 – 65 °C   |

NOTICE
The properties shown are typical values and are not intended as product specification. All information given should serve only as a guide. There is no implied warranty of merchantability or fitness for a particular purpose. Establishing satisfactory performance of the product for the intended application is the customer’s role responsibility. No warranty is given concerning the existence or non-existence of any patents claiming any pertinent subject matter presented herein.