

### UNISOFT TPE™ ST-40A-CL-1-01

|                     |   |
|---------------------|---|
| <b>DESCRIPTION</b>  | TPE Compound based on Styrene-Ethylene/Butylene-Styrene Block Copolymer   |
| <b>FEATURES</b>     | Standard grade with adhesion to Polypropylene, low density, translucent, excellent processing, J&J approval;  |
| <b>APPLICATIONS</b> | Unisoft TPE™ <b>ST-40A-CL-1-01</b> is a general grade intended for use in injection molding and extrusion processes. All ingredients used for this compound are in compliance with certain FDA regulations. |
| <b>COLOR</b>        | Clear color, translucent  |
| <b>SUPPLIER</b>     | UNITED SOFT PLASTICS, INC.<br>720 Raco Drive<br>Lawrenceville, GA 30045 - USA<br>Assistance: +1 770 339 9362  |

| MECHANICAL PROPERTIES | TEST METHOD   | ENGLISH - UNITS | SI - UNITS      |
|-----------------------|---------------|-----------------|-----------------|
| SHORE HARDNESS        | ASTM D - 2240 | 40 A            | 40 A            |
| SPECIFIC GRAVITY      | ASTM D - 792  | 0.88 ( g / cc ) | 0.88 ( g / cc ) |
| TENSILE STRENGTH      | ASTM D - 412  | 1,100 ( psi )   | 7.6 ( Mpa )     |
| ELONGATION AT BREAK   | ASTM D - 412  | 700 ( % )       | 700 ( % )       |

### PROCESSING INFORMATION

|                               |   |              |              |
|-------------------------------|---|--------------|--------------|
| <b>PROCESSING INFORMATION</b> | Injection Molding (preferable standard 2-component injection molding machine to get adhesion to substrate), Extrusion   |              |              |
| <b>PURGING</b>                | Purge thoroughly before and after use of this product (e.g. Polypropylene with MFI between 0.5 – 2.5)   |              |              |
| <b>DRYING TIME</b>            | Material is not hygroscopic and drying is only necessary if material was stored under moisture.   |              |              |
| <b>COLORING</b>               | Material can be easily colored with standard color concentrates used for coloring Polypropylene.  |              |              |
| <b>SHRINKAGE PROPERTIES</b>   | 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™ <b>ST-40A-CL-1-01</b> shows shrinkage values between 0.5 – 3.5 %. |              |              |
| <b>RHEOLOGICAL PROPERTIES</b> | 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.                               |              |              |
| <b>MOLDING TEMPERATURES</b>   | Rear  | 320 - 355 °F | 160 - 180 °C |
|                               | Front   | 355 - 395 °F | 180 - 200 °C |
|                               | Nozzle  | 395 - 410 °F | 200 - 210 °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.