



UNITED SOFT PLASTICS

Product Information

UNISOFT TPE™ ST-50A-CL-1-01

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|---------------------|---|
| DESCRIPTION | TPE Compound based on Styrene-Ethylene/Butylene-Styrene Block Copolymer |
| FEATURES | Standard grade with adhesion to Polypropylene, low density, translucent |
| APPLICATIONS | Unisoft TPE™ ST-50A-CL-1-01 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. |
| COLOR | Clear color, translucent |
| SUPPLIER | UNITED SOFT PLASTICS, INC. 720 Raco Drive Lawrenceville, GA 30045 - USA Assistance: +1 770 339 9362 |

| MECHANICAL PROPERTIES | TEST METHOD | ENGLISH - UNITS | SI - UNITS |
|-----------------------|---------------|-----------------|-----------------|
| SHORE HARDNESS | ASTM D - 2240 | 50 A | 50 A |
| SPECIFIC GRAVITY | ASTM D - 792 | 0.88 (g / cc) | 0.88 (g / cc) |
| TENSILE STRENGTH | ASTM D - 412 | 1,400 (psi) | 9.6 (MPa) |
| ELONGATION AT BREAK | ASTM D - 412 | 825 (%) | 825 (%) |

PROCESSING INFORMATION

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|-------------------------------|---|--------------|--------------|
| PROCESSING INFORMATION | 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 can be easily colored with standard color concentrates used for coloring Polypropylene. | | |
| 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-CL-1-01 shows shrinkage values between 0.8 – 2.7 %. | | |
| 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 - 430 °F | 200 - 220 °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.