

Product Information

UNISOFT TPE™ ST-30A-BK-1-01

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-30A-BK-1-01** is a general grade intended for use in injection molding.

COLOR Black (about RAL 9005)

SUPPLIER UNITED SOFT PLASTICS, INC.

720 Raco Drive

Lawrenceville, GA 30045 - USA Assistance: +1 404 543 3527

| MECHANICAL PROPERTIES | TEST METHOD | ENGLISH - UNITS | SI - UNITS |
|-----------------------|---------------|-----------------|-------------|
| | | | |
| SHORE HARDNESS | ASTM D - 2240 | 30 A | 30 A |
| SPECIFIC GRAVITY | ASTM D - 792 | 1.19 (g/cc) | 1.19 (g/cc) |
| TENSILE STRENGTH | ASTM D - 412 | 575 (psi) | 4.0 (Mpa) |
| ELONGATION AT BREAK | ASTM D - 412 | 600 (%) | 600 (%) |

PROCESSING INFORMATION

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 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 $^{\text{TM}}$ **ST-30A-BK-1-01** shows shrinkage values between 1.0–3.2 %.

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 $395 - 410 \, ^{\circ} F$ $200 - 210 \, ^{\circ} C$ Mold $85 - 150 \, ^{\circ} F$ $30 - 65 \, ^{\circ} C$

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.

Printed in U.S.A. © 2006 UNITED SOFT PLASTICS, Inc.

Page 1 of 1