U S P
UNITED SOFT PLASTICS

Product Information

UNISOFT TPE™ ST-40A-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-40A-BK-1-01** is a general grade intended for use in injection molding.

COLOR Black (about RAL 9005)

SUPPLIER
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MECHANICAL PROPERTIES	TEST METHOD	ENGLISH - UNITS	S I - UNITS
SHORE HARDNESS	ASTM D - 2240	40 A	40 A
SPECIFIC GRAVITY	ASTM D - 792	1.14 (g / cc)	1.14 (g / cc)
TENSILE STRENGTH	ASTM D - 412	650 (psi)	4.5 (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™ **ST-40A-BK-1-01** shows shrinkage values between 1.0– 3.0 %.

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 ^{0}F	160 - 180 ^{0}C
	Front	355 - 395 ^{0}F	180 - 200 ^{0}C
	Nozzle	395 - 410 ^{0}F	200 - 210 ^{0}C
	Mold	85 - 150 ^{0}F	30 – 65 ^{0}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.