

### UNISOFT ADHESION™ AD-80A-NT-1-21

<b>DESCRIPTION</b>	TPE Compound based on Styrene-Ethylene/Butylene-Styrene Block Copolymer
<b>FEATURES</b>	Special bonding grade to PC/ABS, PC/PBT, PC, ABS, PBT, PET and PET-G; excellent processing; cost optimized;
<b>APPLICATIONS</b>	Unisoft Adhesion™ <b>AD-80A-NT-1-21</b> is a general adhesion 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>	Natural color (about RAL 9010)
<b>SUPPLIER</b>	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	80 A	80 A
SPECIFIC GRAVITY	ASTM D - 792	1.18 (g/cc)	1.18 (g/cc)
TENSILE STRENGTH	ASTM D - 412	1,100 (psi)	7.6 (Mpa)
ELONGATION AT BREAK	ASTM D - 412	550 (%)	550 (%)

### PROCESSING INFORMATION

<b>PROCESSING INFORMATION</b>	Injection Molding (preferable standard 2-component injection molding machine to get adhesion to substrate). Material should be processed with high injection speed		
<b>PURGING</b>	Purge thoroughly before and after use of this product (e.g. Polystyrene or 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, however pre-drying can be useful to achieve a better adhesion result to the substrate. (Pre-drying conditions: 2-4hours at appr. 150 °F / 65 °C)		
<b>COLORING</b>	Material can be easily colored with standard color concentrates used for coloring Polystyrene or Polypropylene.		
<b>SHRINKAGE PROPERTIES</b>	Unisoft Adhesion grades are anisotropic materials. Their shrinkage properties are higher in the flow direction, and the shrinkage in the cross-flow direction is less. Unisoft Adhesion <b>AD-80A-NT-1-21</b> shows shrinkage values between 0.7 – 1.5 %.		
<b>RHEOLOGICAL PROPERTIES</b>	Rheological data of Unisoft Adhesion materials are shear dependant, and their viscosity is increasing at low shear rates and vice versa flow rates increase at higher shear rates. Therefore we recommend that this fact should be considered when designing injection molds and also when setting mold conditions during processing.		
<b>MOLDING TEMPERATURES</b>	Temperatures are shown for PET-G adhesion. For better adhesion results to other substrates temperatures can be increased in the first 3 zones up to 25°F/15°C per zone.		
	Zone 1) Rear	390 - 410 °F	200 - 210 °C
	Zone 2) Front	425 - 445 °F	220 - 230 °C
	Zone 3) Nozzle	455 - 475 °F	235 - 245 °C
	Mold	105 - 150 °F	40 – 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.