

Lubrizol Estane® T465A Thermoplastic Polyurethane (discontinued **)

Categories: [Polymer](#); [Thermoplastic](#); [Polyurethane, TP](#); [Thermoplastic Polyurethane \(TPUR\)](#), [Polyester Grade](#)

Material Notes: Type: Estane® T465A is a Shore 71A, polyester grade, plasticizer-free, with low hardness thermoplastic polyurethane (TPU).

Uses: Injection Molding, Extrusion.

Information Provided by The Lubrizol Corporation

Key Words: TPU

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Specific Gravity	1.13 g/cc	1.13 g/cc	ASTM D792
Linear Mold Shrinkage	0.010 cm/cm	0.010 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	71	71	ASTM D2240
Tensile Strength, Ultimate	21.6 MPa	3130 psi	ASTM D412
Tensile Strength, Yield	2.55 MPa	370 psi	at 100% elongation; ASTM D412
	4.51 MPa	654 psi	at 300% elongation; ASTM D412
Elongation at Break	950 %	950 %	ASTM D412
Tear Strength	58.8 kN/m	336 pli	Die C; ASTM D624
Compression Set	10 %	10 %	ASTM D395
	@Temperature 23.0 °C, @Temperature 73.4 °F, Time 79200 sec Time 22.0 hour		
	30 %	30 %	ASTM D395
	@Temperature 70.0 °C, @Temperature 158 °F, Time 79200 sec Time 22.0 hour		

Thermal Properties	Metric	English	Comments
Vicat Softening Point	75.0 °C	167 °F	ASTM D1525

Processing Properties	Metric	English	Comments
Feed Temperature	165 - 180 °C	329 - 356 °F	
Nozzle Temperature	175 - 190 °C	347 - 374 °F	
Mold Temperature	10.0 - 40.0 °C	50.0 - 104 °F	
Injection Pressure	8.27 - 13.8 MPa	1200 - 2000 psi	
Hold Pressure	5.52 - 9.65 MPa	800 - 1400 psi	
Back Pressure	0.207 - 0.552 MPa	30.0 - 80.0 psi	
Cycle Time - Injection	35 - 45 sec	35 - 45 sec	
Screw Speed	160 - 200 rpm	160 - 200 rpm	

Descriptive Properties

Injection Time (s) 15-20

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Materials flagged as discontinued () are no longer part of the manufacturer's standard product line according to our latest information. These materials may be available by special order, in distribution inventory, or reinstated as an active product. Data sheets from materials that are no longer available remain in MatWeb to assist users in finding replacement materials.

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