

Type: Estane[®] T460A is a Shore 66A, polyester grade, plasticizer-free, with low hardness thermoplastic polyurethane (TPU).

Uses: Injection Molding, Extrusion

Physical Properties	Standard No.	Units	Value
Hardness	ASTM D2240	Shore A	66
Specific Gravity	ASTM D792	g/cm ³	1.12
Mechanical			
Tensile Stress	ASTM D412	kgf/cm ²	
At 100% elongation			22
At 300% elongation			40
Tensile Strength	ASTM D412	kgf/cm ²	200
Ultimate Elongation	ASTM D412	%	860
Tear Resistance (Die C)	ASTM D624	kgf/cm	60
Compression Set	ASTM D395		
At 23°C X22hr		%	10
At 70°C X22hr		%	30
Mold Shrinkage	ASTM D955	m/m	0.013
Thermal			
Vicat Softening Temperature	ASTM D1525	°C	75

* Test samples were annealed at 100°C and 24 hours at room temperature before testing.

**These are typical values and should not be used for specifications.

Injection Molding Guide

These settings are to be used only as a guide. This is a typical injection molding temperature profile based on the Test Machine (conditions based on a 75 ton machine with a general purpose screw – L/D 17 – Ø 35mm). The optimal run conditions for specific equipment will vary depending on the machine and mold design.

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Drying Conditions

Drying	Conditions
Recommend 1	70~80°C for 4-5 hours by dehumidifying dryer

Injection Conditions

Barrel Temperature	
Feeding Zone	165~180
Metering Zone	170~185
Nozzle	175~190
Injection Conditions (I)	
Injection Pressure (psi)	1200~2000
Injection Speed	Slow
Hold Pressure (psi)	800~1400
Injection Time(s)	15~20

Mold Temperature	
10-40	
Injection Conditions (II)	
Back Pressure (psi)	30~80
Screw Speed (rpm)	160-200
Cycle Time(s)	35~45