

Technical Data Sheet

Type: Estane® T370A is a Shore 74A, polyether grade, plasticizer-free, with low hardness thermoplastic polyurethane (TPU).

Uses: Injection Molding, Extrusion

Physical Properties	Standard No.	Units	Value
Hardness	ASTM D2240	Shore A	75
Specific Gravity	ASTM D792	g/cm ³	1.06
Mechanical			
Tensile Stress:	ASTM D412	kgf/cm ²	
At 100% elongation			32
At 300% elongation			57
Tensile Strength	ASTM D412	kgf/cm ²	250
Ultimate Elongation	ASTM D412	%	900
Tear Resistance (Die C)	ASTM D624	kgf/cm	70
Compression Set	ASTM D395		
At 23°C X22hr		%	10
At 70°C X22hr		%	30
Mold Shrinkage	ASTM D955	m/m	0.006
Thermal			
Vicat Softening Temperature	ASTM D1525	°C	70

*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.

Drying Conditions

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

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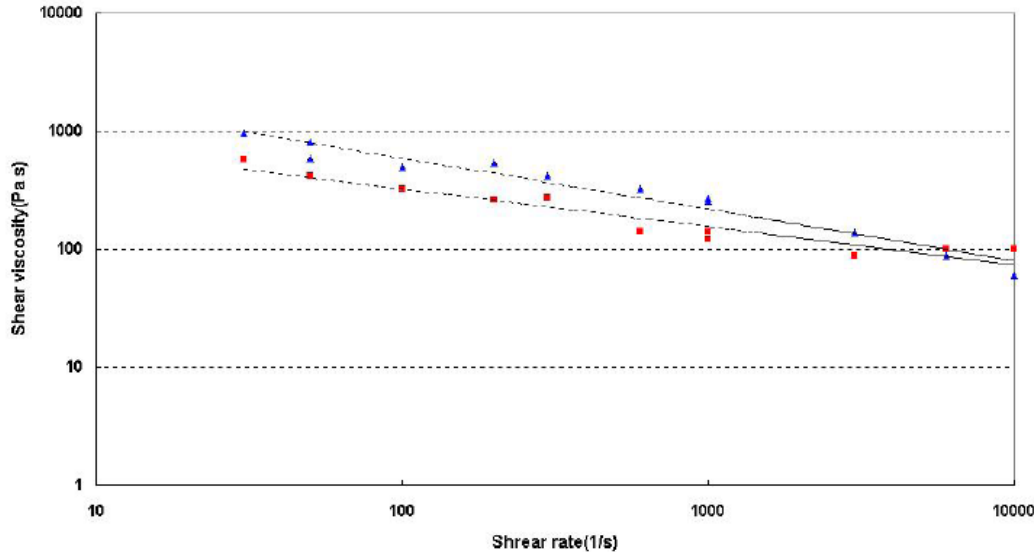
Injection Conditions

Barrel Temperature	
Feeding Zone	185~190
Metering Zone	190~200
Nozzle	195~205
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)	35~40

Flow Characteristics

1. Test Method: ASTM D3835 (Standard Test Method for Determination of Properties of Polymeric Materials by Means of a Capillary Rheometer)
2. Apparatus: Capillary Rheometer
3. Test Conditions: Drying -80°C 4hr (Dehumidified dryer), Temperature -180°C, 190°C



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