

Technical Data Sheet

Type: Estane[®] X590A-2FR TPU is a Shore 89A, polyester type thermoplastic polyurethane elastomer.

Uses: Film Blowing, Extrusion

Physical Properties	Standard No.	Units	Value
Hardness	ASTM D2240	Shore A	89
Specific Gravity	ASTM D792	g/cm ³	1.21
Mechanical			
Tensile Stress:	ASTM D412	kgf/cm ²	
At 100% elongation			80
At 300% elongation			150
Tensile Strength	ASTM D412	kgf/cm ²	350
Ultimate Elongation	ASTM D412	%	650
Tear Resistance (Die C)	ASTM D624	kgf/cm	105
Compression Set			
At 23°C X22hr		%	25
At 70°C X22hr		%	55
Extrusion Conditions***			
Barrel 1/2/3/4		°C	180/185/190/190
Adaptor		°C	195
Die		°C	185
Thermal			
Vicat Softening Temperature	ASTM D1525	°C	90

*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.

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