

Technical Data Sheet

Type: Pearlstick[™] 5701 is a Polyester-Type Thermoplastic Polyurethane (TPU).

Features: Displays low temperature flexibility and abrasion resistance.

Uses: Audio tape binder and screen printing inks, inks and lacquers, cast film for lamination.

Physical Properties	Value (Metric)	Units	Test Method		
Specific Gravity	1.21		ASTM D-792		
Shore Hardness	85A	Shore A	ASTM D-2240		
Mechanical					
Tensile Strength	7100 (49.0)	psi (MPa)	ASTM D-412/D-638		
Modulus			ASTM D-412/D-638		
- 100% Elongation	750 (5.2)	psi (MPa)			
- 300% Elongation	1900 (13.1)	psi (MPa)			
Ultimate Elongation	460	%	ASTM D-412/D-638		
Brookfield Viscosity			RVT Spindle #2, 20 RPM, 23°C		
- 15% T.S. in THF	475	cps			
- 15% T.S. in Cyclohexanone	2400	cps			
Adhesion to PET	0.6 (0.11)	lb/in (kN/m)	TP-141		

Prior to testing samples were conditioned at 23°C for 48 hours.

Based on extruded sheet (30 mils)

Listed values are "typical (average) values" and should/cannot be applied for specification purposes.

Supply Form and Standard Packaging

Pearlstick[™] 5701 is supplied in pellet form and packaged in 1000 lb boxes.

Properties	Value (Metric)	Units*	Test Method		
Thermal					
Glass Transition Temperature	-18(-28)	°F(°C)	DSC**		
Vicat Softening Point	158 (70)	°F(°C)	ASTM D-1525		
Adhesive					
Ring and Ball Softening Point	322 (161)	°F(°C)	ASTM E-28-92		
Melt Viscosity @ 400°F (204°C)	28000	cps	ASTM D-1084-88		
Gradient Bar Tack Temperature	250 (121)	°F(°C)			
Open Time	< 5	sec	ASTM D-4497-94		
T-peel, Aluminum Foil	5.0 (0.9)	lb/in (kN/m)	ASTM D-1876-72		
T-peel, Mylar Film	28.6 (5.0)	lb/in (kN/m)	ASTM D-1876-72		

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STORAGE

Pearlstick™ 5701 must be stored in a cool (15–25°C) and environment prior to being processed. Standard practice of consuming resin on first-in first-out basis should be employed.

For further information refer to Lubrizol Advanced Materials processing guides.

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