

Technical Data Sheet

Type: Pearlthane® 11T85UV is a UV resistant polycaprolactone copolyester-based thermoplastic

polyurethane.

Main Application: Extrusion/Molding

Special Features: Adequate hardness with excellent flow and mechanical properties.

Physical Properties*	Value (Metric)	Unit	Test Method
Hardness	A/1 : 86	Shore A/D	ISO 868
Specific Gravity	1.16	g/cm ³	ISO 2781
Tensile Strength	40	MPa	ISO 527-2/5A/500
Ultimate Elongation	630	%	ISO 527-2/5A/500
Tensile Stress at			
50 % Elongation	5	MPa	ISO 527-2/5A/500
100 % Elongation	6	MPa	ISO 527-2/5A/500
300 % Elongation	10	MPa	ISO 527-2/5A/500
Tear Strength Unnicked	90	kN/m	ISO 34-1B
Abrasion Resistance	25	mm ³	ISO 4649-A
Vicat Softening Point	90	°C	ISO 306 (A50)

^{*}Based on extruded strips.

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

See reverse side for processing information.

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Material Preparation

Prior to processing, Pearlthane[®] 11T85UV must be dried at 100°-110°C during 1-2 hours. It is recommended to dry the material in a dehumidifying type dryer. Target dew point to be below -30°C, preferably -40°C.

Recommended Extrusion Temperature Profile:

	°C	
Hopper cooling	Yes	
Zone 1	175-195	
Zone 2	185-205	
Zone 3	195-215	
Zone 4	200-220	
Adapter 5	200–220	
Die (6)	190–200	
Die TIP (7)	190–210	

For further information refer to Lubrizol Advanced Materials processing guides.

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