

Technical Data Sheet

Type: Pearlthane® 11T85E is a polycaprolactone copolyester-based thermoplastic polyurethane.

Main Application: Extrusion/Moulding

Special Features: Combining hardness with excellent 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	35	MPa	ISO 527-2/5A/500
Ultimate Elongation	650	%	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	11	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® 11T85E must be dried at 100°C during 3 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)	190–210
Die TIP (7)	190–210

For further information refer to Lubrizol Advanced Materials processing guides.

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