

Technical Data Sheet

Type: Pearlthane® 11T80 is a polycaprolactone copolyester-based thermoplastic polyurethane.

Main Application: Injection Moulding

Special Features: Combining hardness with excellent mechanical properties as well as an improved transparency.

Physical Properties*	Value (Metric)	Unit	Test Method
Hardness	A/1 : 82	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	4	MPa	ISO 527-2/5A/500
100 % Elongation	5	MPa	ISO 527-2/5A/500
300 % Elongation	8	MPa	ISO 527-2/5A/500
Tear Strength Unnicked	80	kN/m	ISO 34-1B
Abrasion Resistance	20	mm ³	ISO 4649-A
Vicat Softening Point	77	°C	ISO 306 (A50)

*Based on moulded plaques.

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® 11T80 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 Injection Moulding Temperature Profile:

	°C
Feed Zone	40
Zone 1	180-210
Zone 2	185-210
Zone 3	190-220
Zone 4	185-215
Nozzle	185-215

For further information refer to Lubrizol Advanced Materials processing guides.

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