

Technical Data Sheet

Type: Pearlthane® 91T85 is an aliphatic-based thermoplastic polyurethane.

Main Application: Injection Moulding

Special Features: Low density, fast processing and excellent elasticity properties.

Physical Properties*	Value (Metric)	Unit	Test Method
Hardness	A/1 : 88	Shore A/D	ISO 868
Specific Gravity	1.11	g/cm ³	ISO 2781
Tensile Strength	27	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	5	MPa	ISO 527-2/5A/500
300 % Elongation	9	MPa	ISO 527-2/5A/500
Tear Strength Unnicked	91	kN/m	ISO 34-1B
Abrasion Resistance	30	mm ³	ISO 4649-A
Vicat Softening Point	85	°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® 91T85 must be dried at 90°C during 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 Injection Moulding Temperature Profile:

	°C
Feed Zone	40
Zone 1	180
Zone 2	185
Zone 3	190
Zone 4	190
Nozzle	185

For further information refer to Lubrizol Advanced Materials processing guides.

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