

## Technical Data Sheet

**Type:** Pearlthane® 11T85 is a polycaprolactone copolyester-based thermoplastic polyurethane.

**Main Application:** Injection Moulding

**Special Features:** Adequate hardness, excellent mechanical properties and easy processing.

Physical Properties*	Value (Metric)	Unit	Test Method
Hardness	A/1 : 86	Shore A/D	ISO 868
Specific Gravity	1.16	g/cm <sup>3</sup>	ISO 2781
Tensile Strength	40	MPa	ISO 527-2/5A/500
Ultimate Elongation	640	%	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	20	mm <sup>3</sup>	ISO 4649-A
Vicat Softening Point	87	°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® 11T85 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
<b>Feed Zone</b>	<b>40</b>
<b>Zone 1</b>	<b>195</b>
<b>Zone 2</b>	<b>200</b>
<b>Zone 3</b>	<b>210</b>
<b>Zone 4</b>	<b>210</b>
<b>Nozzle</b>	<b>210</b>

For further information refer to Lubrizol Advanced Materials processing guides.

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