

## Technical Data Sheet

**Type** Pearlthane® MAXI 12T85E is a polyester-based thermoplastic polyurethane.

**Main application:** Extrusion

**Special Features:** Medium hardness, good mechanical properties and outstanding abrasion resistance.

Physical Properties	Value (Metric)	Unit	Test Method
Hardness	A/1: 86	Shore A/D	ISO 868
Specific Gravity	1.21	g/cm <sup>3</sup>	ISO 2781
Tensile Strength	42	MPa	ISO 527-2/5A/200
Ultimate Elongation	580	%	ISO 527-2/5A/200
Tensile Stress at:			
- 50 % Elongation	-	MPa	ISO 527-2/5A/200
- 100 % Elongation	6	MPa	ISO 527-2/5A/200
- 300 % Elongation	10	MPa	ISO 527-2/5A/200
Tear Strength nicked	-	kN/m	ISO 34-1B
Abrasion Resistance	30	mm <sup>3</sup>	ISO 4649-A
Vicat Softening Point	-	°C	ISO 306 (A50)

\* Based on extruded strips.

Listed values are “typical (average) values” and should /cannot be applied for specification purposes

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## Material Preparation

Prior to processing, **Pearlthane® MAXI 12T85E** be dried at **100°C** for 3-4 hours.  
It is recommended to dry the material in a dehumidifying type dryer.  
Target dew point should be **-40°C**.

## Recommended Starting EXTRUSION Temperature Profile:

	°C
<b>Hopper Cooling</b>	<b>Yes</b>
<b>Zone 1</b>	<b>175-195</b>
<b>Zone 2</b>	<b>185-205</b>
<b>Zone 3</b>	<b>195-225</b>
<b>Zone 4</b>	<b>190-225</b>
<b>Adapter 5</b>	<b>185-195</b>
<b>Die (6)</b>	<b>185-195</b>
<b>Die TIP (7)</b>	<b>185-195</b>

For further information refer to Lubrizol Advanced Materials processing guides.

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