

**Technical Data Sheet**

**Type:** ESTANE® ECO 12T85 is a high-performance bio-based thermoplastic polyurethane. With Ca 46% bio-based content.

**Main application:** Injection Molding

**Special Features:** Properties similar to standard TPU of same hardness, excellent mechanical properties and abrasion resistance.

Physical Properties	Value (Metric)	Unit	Test Method
Hardness	A/3: 85	Shore A/D	ISO 868
Specific Gravity	1.15	g/cm <sup>3</sup>	ISO 2781
Tensile Strength	40	MPa	ISO 527-2/5A/200
Ultimate Elongation	440	%	ISO 527-2/5A/200
Tensile Stress at:			
- 100 % Elongation	6	MPa	ISO 527-2/5A/200
- 300 % Elongation	20	MPa	ISO 527-2/5A/200
Tear Strength nicked	-	kN/m	ISO 34-1B
Abrasion Resistance	30	mm <sup>3</sup>	ISO 4649-A

\* Based on moulded plaques

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

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## Material Preparation

Prior to processing, **ESTANE<sup>®</sup> ECO 12T85** must be dried at **80°C** during 2 hours.  
It is recommended to dry the material in a dehumidifying type dryer.  
Target dew point should be -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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