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^3	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^3	ISO 4649-A

* Based on moulded plaques

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

Material Preparation

Prior to processing, **ESTANE® ECO 12T85** must be dried at **80ºC** during 2 hours.
It is recommended to dry the material in a dehumidifying type dryer.
Target dew point should be -30°C, preferably -40ºC.

Recommended Injection Moulding Temperature Profile:

	°C
Feed zone	**40**
Zone 1	**195**
Zone 2	**200**
Zone 3	**210**
Zone 4	**210**
Nozzle	**210**

For further information refer to Lubrizol Advanced Materials processing guides.