

Preliminary Technical Data Sheet

Type: ESTANE® ECO 16T90 is a 91 shore A bio-based Thermoplastic Polyurethane (TPU).

Features: good transparency and UV stabilized clear TPU

Uses: injection molding

Physical Properties	Value (Metric)	Unit	Test Method
Hardness (5 sec)	91	Shore A	ISO868
Specific Gravity	1.16	-	ASTM D-792
Tensile Strength	40	Mpa	ASTM D-412
Ultimate Elongation	590	%	ASTM D-412
Tensile Stress at:			
- 100 % Elongation	10	Mpa	ASTM D-412
- 300 % Elongation	16	Mpa	ASTM D-412
Bio-based content	24.3	%	ASTM D6866

Remark:

- Based on 2mm injection part.
- Prior to testing samples were conditioned at 23°C for 48 hours.
- Listed values are "typical (average) values" and should/cannot be applied for specification purposes.

Supply Form and Standard Packaging

- ESTANE® ECO 16T90 is supplied in pellet form and packaged in 25 Kgs bags.

Material Preparation

- Prior to processing, ESTANE® ECO 16T90 must be dried at 100°C for 2-4 hours.
- It is recommended to dry the material in a desiccant type dryer. Target dew point should be -40°C.
- The maximum appropriate moisture rate for injection molding is 0.05% (500ppm).

Material Preparation

- ESTANE® ECO 16T90 can be used in a normal injection molding machine.

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Recommended Starting injection Temperature Profile:

	°C
Zone 1	200
Zone 2	205
Zone 3	210
Zone 4	210
Nozzle	205

For further information refer to Lubrizol Advanced Materials processing guides.

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