

Technical Data Sheet

Type: ESTANE® ECO 16T75 NAT 01 is a 77 shore A polyether Thermoplastic Polyurethane (TPU) with 38% bio-based content

Features: Good molding performance soft TPU with UV stabilized

Uses: Injection molding

Physical Properties	Value (Metric)	Unit	Test Method
Hardness (5 sec)	77	Shore A	ASTM D-2240
Specific Gravity	1.10		ASTM D-792
Tensile Strength	20	MPa	ASTM D-412
Ultimate Elongation	850	%	"
Tensile Stress at:			
- 100 % Elongation	3.5	MPa	ASTM D-412
- 300 % Elongation	5.4	MPa	"
Tear Strength			
- Graves	60	Kgf/cm	ASTM D-624 (die C)
Bio-base content	38	%	ASTM D6866-12

Remark:

- Prior to testing samples were conditioned at 23°C for 48 hours.
- Based on injected plaque (2mm).

• Listed values are "typical (average) values" and should/cannot be applied for specification purposes.

Supply Form and Standard Packaging

• ESTANE® ECO 16T75 NAT 01 is supplied in pellet form and packaged in 25kgs.

Material Preparation

- Prior to processing, ESTANE® ECO 16T75 NAT 01 must be dried at 158~176°F (70~80°C) for 2-4 hours.
- It is recommended to dry the material in a desiccant type dryer. Target dew point should be -40°C.
- Depending on the applied processing technique, the maximum moisture level should be 0.05%.

Material Preparation

• ESTANE® ECO 16T75 NAT 01 can be processed on any conventional injection molding machine.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. The information often is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance or reproducibility. Formulations presented may not have been tested for stability and should be used only as a suggested starting point. Because of the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond Lubrizol Advanced Materials, Inc.'s direct control. The SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLED, INCLUDING, BUT NOT LIMITED TO, THE IMPLED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation nor as an inducement to practice any patented invention without permission of the patent owner.

ADVANCING MATERIALS.

ELEVATING PERFORMANCE.



© 2023 The Lubrizol Corporation. All rights reserved. All marks are the property of The Lubrizol Corporation.





Recommended Starting INJECTION MOLDING Temperature Profile:

	°C
Zone 1	190
Zone 2	195
Zone 3	200
Nozzle	195

Fill rate : Slow

For further information refer to Lubrizol Advanced Materials processing guides.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. The information often is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance or reproducibility. Formulations presented may not have been tested for stability and should be used only as a suggested starting point. Because of the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond Lubrizol Advanced Materials, Inc.'s direct control. The SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation nor as an inducement to practice any patented invention without permission of the patent owner.

ADVANCING MATERIALS.

ELEVATING PERFORMANCE.

© 2023 The Lubrizol Corporation. All rights reserved. All marks are the property of The Lubrizol Corporation.



