

## Technical Data Sheet

**Type:** Estane® ETE 50DT3 is a 50D aromatic Polyether-Based Thermoplastic Polyurethane (TPU).

**Feature:** Hard TPU with wide extrusion processing window and melt stability, low temperature flexibility, high transparency, UV stable.

**Uses:** Extrusion: Hose and Tube, Extrusion: Profile, Cable Jacket; Injection molding: Various.

Physical Properties	Value (Metric Units)	Unit	Test Method
Hardness (5 sec)	50 +/- 3	Shore D	ASTM D-2240
Specific Gravity	1.16		ASTM D-792
Tensile Strength	8700 (60.0)	psi (MPa)	ASTM D-412
Ultimate Elongation	420	%	"
Tensile Stress at:			
- 100 % Elongation	2200 (15.2)	psi (MPa)	ASTM D-412
- 300 % Elongation	5100 (35.2)	psi (MPa)	"
Tear Strength			
Graves	810 (142.0)	lb/in (kg/mm)	ASTM D-624 (die C)
Trouser	190 (33)	lb/in (kg/mm)	ASTM D-470
Taber Loss (1000 rev)	0.00286 (81)	oz (mg)	ASTM D-3389 (H18, 1000g)
T <sub>m</sub> (by DSC)	302 (150)	°F (°C)	Lubrizol Advanced Materials
T <sub>g</sub> (by DSC)	-27 (-33)	°F (°C)	Lubrizol Advanced Materials

- Prior to testing samples were conditioned at 23°C for 48 hours.
- Based on extruded sheet (30 mils).
- Listed values are "typical (average) values" and should / can not be applied for specification purposes.

## Supply Form and Standard Packaging

- Estane® ETE 50DT3 TPU is supplied in pellet form and packaged in 50 lb bags or 1000 lb boxes.

## Material Preparation

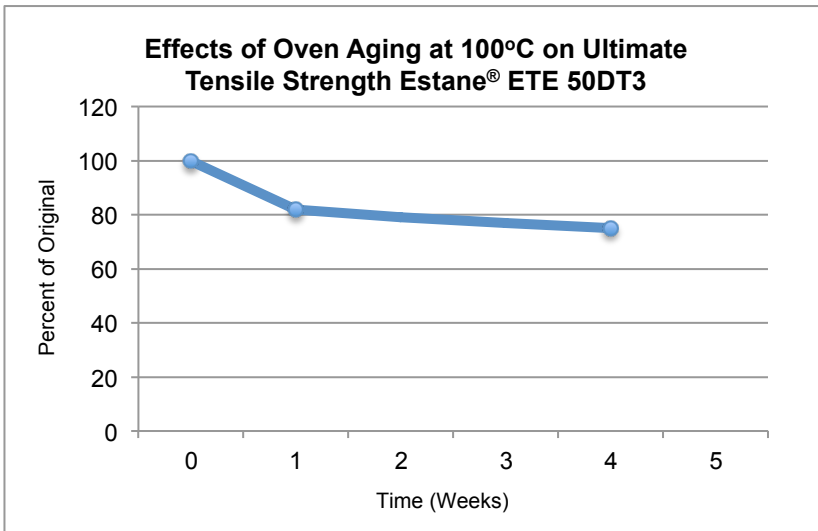
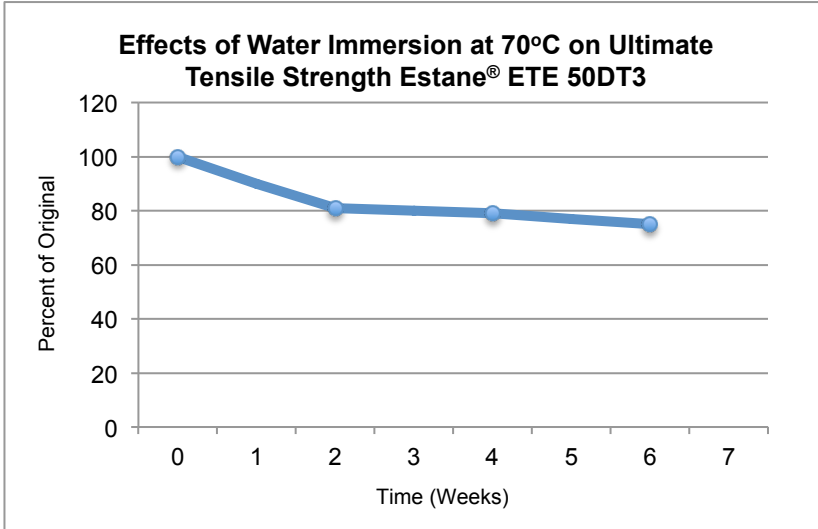
- Prior to processing, Estane® ETE 50DT3 TPU must be dried at 220°F (104°C) for 2-4 hours.
- It is recommended to dry the material in a desiccant type dryer. Target dew point should -40°C.
- Depending on the applied processing technique, the maximum moisture level should be 0.02%.

## Processing Conditions

- Estane® ETE 50DT3 TPU was extruded on any conventional extruder.

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**For further information refer to Lubrizol Advanced Materials processing guides.**

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