

Technical Data Sheet

Type: Estane® ETE 70DT3 is a 70D aromatic Polyether-Based Thermoplastic Polyurethane (TPU).

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

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

Physical Properties	Value (Metric Units)	Unit	Test Method
Hardness (5 sec)	70 +/- 3	Shore D	ASTM D-2240
Specific Gravity	1.18		ASTM D-792
Tensile Strength	7500 (52)	psi (MPa)	ASTM D-412
Ultimate Elongation	360	%	"
Tensile Stress at:			
- 100 % Elongation	2800 (19)	psi (MPa)	ASTM D-412
- 300 % Elongation	5900 (41)	psi (MPa)	"
Tear Strength			
Graves	1200 (210)	lb/in (kg/mm)	ASTM D-624 (die C)
Trouser	190 (33)	lb/in (kg/mm)	ASTM D-470
Taber Loss (1000 rev)	.00224 (64)	oz (mg)	ASTM D-3389 (H18, 1000g)
T _m (by DSC)	392(200)	°F (°C)	Lubrizol Advanced Materials
T _g (by DSC)	-8(-22)	°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 / cannot be applied for specification purposes.

Supply Form and Standard Packaging

- Estane® ETE 70DT3 TPU is supplied in pellet form and packaged in 50 lb bags or 1000 lb boxes.

Material Preparation

- Prior to processing, Estane® ETE 70DT3 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 70DT3 TPU was extruded on any conventional extruder.

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Recommended Starting Extrusion Temperature Profile:

	°F/°C
Zone 1	400/204
Zone 2	410/210
Zone 3	420/216
Zone 4	420/216
Adapter	420/216
Die Zone 1	425/218
Die Zone 2	425/218

Melt Temp. Mid-Range: 415°F/213°C
Screen Pack Recommendation: 20/40/80/20**For further information refer to Lubrizol Advanced Materials processing guides.**

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