



## Estane® ETE 60DS3 TPU

Lubrizol Advanced Materials, Inc. - Thermoplastic Polyurethane Elastomer (Polyester)

Wednesday, November 6, 2019

### General Information

#### Product Description

Type: Estane® ETE 60DS3 is a 60D aromatic Polyester-Based Thermoplastic Polyurethane (TPU).

Features: Hard TPU with wide extrusion processing window and melt stability, high transparency

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

#### General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	• North America
Features	• Aromatic • Good Processability	• High Clarity • High Melt Stability	
Uses	• Cable Jacketing • Hose	• Profiles • Tubing	• Wire & Cable Applications
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Extrusion	• Profile Extrusion	• Wire & Cable Extrusion

### ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.23		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Taber Abrasion Resistance 1000 Cycles, 1000 g, H-18 Wheel	62.0	mg	ASTM D3389
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain, 0.0300 in)	3340	psi	ASTM D412
Tensile Stress (300% Strain, 0.0300 in)	7110	psi	ASTM D412
Tensile Strength (Break, 0.0300 in)	7110	psi	ASTM D412
Tensile Elongation (Break, 0.0300 in)	300	%	ASTM D412
Tear Strength <sup>2</sup> (0.0300 in)	1000	lbf/in	ASTM D624
Tear Strength (Split)	200	lbf/in	ASTM D470
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D, 5 sec)	57 to 63		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature	-0.400	°F	DSC
Melting Temperature	342	°F	DSC

### Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	219	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Cylinder Zone 1 Temp.	390	°F
Cylinder Zone 2 Temp.	399	°F
Cylinder Zone 3 Temp.	399	°F

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Extrusion	Nominal Value	Unit
Cylinder Zone 4 Temp.	410	°F
Adapter Temperature	415	°F
Melt Temperature	399	°F
Die Temperature	410	°F

## Extrusion Notes

Dew Point: -40°C

Screen Pack Recommendation: 20/40/80/20

## Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Die C