



Estane® 58238 TPU

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

Wednesday, November 6, 2019

General Information

Product Description

Type: Polyester Thermoplastic Polyurethane (TPU)

Special Feature: Excellent Elasticity, with Good Recovery and Low Temperature Properties

Processes: Extrusion: Blown, Flat Die Cast Film, and Injection Molding

General

Material Status	• Commercial: Active	
Availability	• Latin America	• North America
Features	• Excellent Elastic Recovery	• Low Temperature Resistant
Uses	• Blown Film	• Cast Film
RoHS Compliance	• RoHS Compliant	
Forms	• Pellets	
Processing Method	• Blown Film	• Extrusion
	• Cast Film	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.17		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Taber Abrasion Resistance			ASTM D3389
1000 Cycles, 1000 g, H-18 Wheel	21.0	mg	
Elastomers	Nominal Value	Unit	Test Method
Tensile Set (200% Strain)	4	%	ASTM D412
Tensile Stress (100% Strain, 0.0300 in)	653	psi	ASTM D412
Tensile Stress (300% Strain, 0.0300 in)	1800	psi	ASTM D412
Tensile Strength (Break, 0.0300 in)	7010	psi	ASTM D412
Tensile Elongation (Break, 0.0300 in)	680	%	ASTM D412
Tear Strength (0.0300 in)	392	lbf/in	ASTM D624
Tear Strength (Split)	100	lbf/in	ASTM D470
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	75		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature	-49.0	°F	DSC
Melting Temperature	262	°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.	351	°F
Cylinder Zone 2 Temp.	361	°F

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Extrusion	Nominal Value	Unit
Cylinder Zone 3 Temp.	379	°F
Cylinder Zone 4 Temp.	381	°F
Adapter Temperature	381	°F
Melt Temperature	376	°F
Die Temperature	381	°F

Extrusion Notes

Screen Pack Recommendation: 20/40/80

Notes

¹ Typical properties: these are not to be construed as specifications.