



Estane® 58810 TPU

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

Wednesday, November 6, 2019

General Information

Product Description

Type: Estane® 58810 TPU is a 90A Polyether-Type thermoplastic polyurethane

Description: High melt flow and improved temperature resistance

Uses: Extrusion - Wire and cable, Hose and tube

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	• North America
Features	• High Flow	• Medium Heat Resistance	
Uses	• Hose	• Tubing	• Wire & Cable Applications
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Extrusion	• Wire & Cable Extrusion	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.13		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus (73°F)	5470	psi	ASTM D790
Taber Abrasion Resistance 1000 Cycles, 1000 g, H-18 Wheel	41.0	mg	ASTM D3389
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain, 0.0300 in)	1310	psi	ASTM D412
Tensile Stress (300% Strain, 0.0300 in)	2490	psi	ASTM D412
Tensile Strength (Break, 0.0300 in)	5550	psi	ASTM D412
Tensile Elongation (Break, 0.0300 in)	530	%	ASTM D412
Tear Strength ² (0.0300 in)	342	lbf/in	ASTM D624
Tear Strength (Split)	100	lbf/in	ASTM D470
Compression Set			ASTM D395
73°F, 22 hr	25	%	
158°F, 22 hr	60	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 5 sec)	87 to 93		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature	-47.2	°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.	349	°F

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Extrusion	Nominal Value	Unit
Cylinder Zone 2 Temp.	360	°F
Cylinder Zone 3 Temp.	376	°F
Cylinder Zone 4 Temp.	385	°F
Adapter Temperature	390	°F
Melt Temperature	385	°F
Die Temperature	381 to 385	°F

Extrusion Notes

Dew Point: -40°C

Screen Pack Recommendation: 20/40/80/20

Notes

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

² Die C