



Estane® 58370 TPU

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

Wednesday, November 6, 2019

General Information

Product Description

Type: Estane® 58370 TPU is an 80A Polyether-Type Thermoplastic Polyurethane.

Features: Halogenated flame retardant compound

Uses: Extrusion - Wire and cable and general application where flame retardant properties are needed

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant		
Features	• Chemical Resistant • Flame Retardant	• Good Toughness • Halogenated	• Oil Resistant
Uses	• 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	1.18		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Taber Abrasion Resistance 1000 Cycles, 1000 g, CS-17 Wheel	3.00	mg	ASTM D3389
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain, 0.0300 in)	696	psi	ASTM D412
Tensile Stress (300% Strain, 0.0300 in)	957	psi	ASTM D412
Tensile Strength (Break, 0.0300 in)	4310	psi	ASTM D412
Tensile Elongation (Break, 0.0300 in)	690	%	ASTM D412
Tear Strength ² (0.0300 in)	342	lbf/in	ASTM D624
Tear Strength (Split)	100	lbf/in	ASTM D470
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 5 sec)	77 to 83		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature	-58.0	°F	DSC
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-2		UL 94
Oxygen Index	28	%	ASTM D2863

Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	219	°F
Drying Time	2.0 to 4.0	hr

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Extrusion	Nominal Value	Unit
Suggested Max Moisture	0.020	%
Cylinder Zone 1 Temp.	347	°F
Cylinder Zone 2 Temp.	356	°F
Cylinder Zone 3 Temp.	370	°F
Cylinder Zone 4 Temp.	381	°F
Adapter Temperature	381	°F
Melt Temperature	370	°F
Die Temperature	370 to 381	°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