



Estane® 58630 TPU

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

Wednesday, November 6, 2019

General Information

Product Description

Type: Estane® 58630 is an 82A aromatic Polyether-Based Thermoplastic Polyurethane (TPU).

Features: Good physical properties, hydrolysis resistance, low temperature performance and abrasion along with wide processing window for extrusion and low surface tack.

Uses: Blown and flat die/cast film extrusion and cable jacketing.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Aromatic	• Good Processability • Hydrolysis Resistant	• Low Temperature Resistant
Uses	• Blown Film • Cable Jacketing	• Cast Film • Wire & Cable Applications	
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Blown Film • Cast Film	• 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
Taber Abrasion Resistance 1000 Cycles, 1000 g, H-18 Wheel	60.0	mg	ASTM D3389
Elastomers	Nominal Value	Unit	Test Method
Tensile Set (200% Strain)	15	%	ASTM D412
Tensile Stress (100% Strain, 0.0300 in)	754	psi	ASTM D412
Tensile Stress (300% Strain, 0.0300 in)	1100	psi	ASTM D412
Tensile Strength (Break, 0.0300 in)	6000	psi	ASTM D412
Tensile Elongation (Break, 0.0300 in)	640	%	ASTM D412
Tear Strength ² (0.0300 in)	398	lbf/in	ASTM D624
Tear Strength (Split)	130	lbf/in	ASTM D470
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 5 sec)	79 to 85		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature	-58.0	°F	DSC
Melting Temperature	248	°F	DSC
Kofler Melting Temperature	257	°F	Internal Method
Aging	Nominal Value	Unit	Test Method
Change in Volume (73°F, 24 hr, in Water)	2.1	%	ASTM D471

Estane® 58630 TPU

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

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.	331	°F
Cylinder Zone 2 Temp.	340	°F
Cylinder Zone 3 Temp.	351	°F
Cylinder Zone 4 Temp.	360	°F
Adapter Temperature	360	°F
Melt Temperature	354	°F
Die Temperature	360	°F

Extrusion Notes

Dew Point: -40°C

Screen Pack Recommendation: 20/40/80

Notes

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

² Die C