

Estane® 58325 TPU

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

Wednesday, November 6, 2019

General Information

Product Description

Type: Estane® 58325 is an 85A aromatic Polyether-Based Thermoplastic Polyurethane (TPU).

Features: High melt strength for thick sheet extrusion.

Uses: Blown and Flat Die/Cast Extrusion, Tubing and Profile Extrusion

General			
Material Status	Commercial: Active		
Availability	 Africa & Middle East Asia Pacific	EuropeLatin America	North America
Features	Aromatic	Good Melt Strength	
Uses	Blown FilmCast Film	 Profiles Sheet	• Tubing
RoHS Compliance	 RoHS Compliant 		
Forms	• Pellets		
Processing Method	Blown FilmCast Film	ExtrusionProfile Extrusion	Sheet Extrusion

ASTM & ISO Properties 1					
Physical	Nominal Value	Unit	Test Method		
Density / Specific Gravity	1.12		ASTM D792		
Mechanical	Nominal Value	Unit	Test Method		
Taber Abrasion Resistance			ASTM D3389		
1000 Cycles, 1000 g, H-18 Wheel	63.0	mg			
Elastomers	Nominal Value	Unit	Test Method		
Tensile Set (200% Strain)	10	%	ASTM D412		
Tensile Stress (100% Strain, 0.0300 in)	798	psi	ASTM D412		
Tensile Stress (300% Strain, 0.0300 in)	1410	psi	ASTM D412		
Tensile Strength (Break, 0.0300 in)	7500	psi	ASTM D412		
Tensile Elongation (Break, 0.0300 in)	600	%	ASTM D412		
Tear Strength ² (0.0300 in)	454	lbf/in	ASTM D624		
Tear Strength (Split)	140	lbf/in	ASTM D470		
Hardness	Nominal Value	Unit	Test Method		
Durometer Hardness (Shore A, 5 sec)	82 to 88		ASTM D2240		
Thermal	Nominal Value	Unit	Test Method		
Glass Transition Temperature	-47.2	°F	DSC		
Melting Temperature	268	°F	DSC		
Aging	Nominal Value	Unit	Test Method		
Change in Volume (73°F, 24 hr, in Water)	1.7	%	ASTM D471		

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.	361	°F
Cylinder Zone 2 Temp.	370	°F
Cylinder Zone 3 Temp.	381	°F
Cylinder Zone 4 Temp.	390	°F
Adapter Temperature	390	°F
Melt Temperature	385	°F
Die Temperature	390	°F
Extrusion Notes		

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