



Estane® 58211 TPU

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

Wednesday, November 6, 2019

General Information

Product Description

Type: Estane® 58211 is a 90A Polyether-Type Thermoplastic Polyurethane (TPU).

Features: Halogenated flame retardant compound - High hardness

Uses: Extrusion - wire and cable jacketing and general extrusion where flame retardant properties are required

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant		
Features	• Chemical Resistant • Flame Retardant	• Halogenated • High Hardness	• Oil Resistant
Uses	• Cable Jacketing	• 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	1.29		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Taber Abrasion Resistance 1000 Cycles, 1000 g, H-18 Wheel	235	mg	ASTM D3389
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain, 0.0300 in)	1250	psi	ASTM D412
Tensile Stress (300% Strain, 0.0300 in)	2150	psi	ASTM D412
Tensile Strength (Break, 0.0300 in)	4050	psi	ASTM D412
Tensile Elongation (Break, 0.0300 in)	340	%	ASTM D412
Tear Strength ² (0.0300 in)	482	lbf/in	ASTM D624
Tear Strength (Split)	120	lbf/in	ASTM D470
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	-36.4	°F	DSC
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-0		UL 94
Oxygen Index	32	%	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.	361	°F
Cylinder Zone 2 Temp.	370	°F
Cylinder Zone 3 Temp.	385	°F
Cylinder Zone 4 Temp.	390	°F
Adapter Temperature	396	°F
Melt Temperature	374	°F
Die Temperature	385 to 396	°F

Extrusion Notes

Dew Point: -40°C

Screen Pack Recommendation: 20/40

Notes

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

² Die C