



Estane® 58213 TPU

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

Wednesday, November 6, 2019

General Information

Product Description

Type: Estane® 58213 is a 75A aromatic Polyester-Based Thermoplastic Polyurethane (TPU).

Features: Excellent blend partner for PVC and general adhesive and good physical properties.

Uses: Flat die/cast film extrusion and hose jacketing, Calendaring/melt coating.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Aromatic		
Uses	• Adhesives • Blending	• Cast Film • Coating Applications	• Hose
Agency Ratings	• FDA 21 CFR 177.1680	• FDA 21 CFR 177.2600	
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Calendaring • Cast Film	• Coating • 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, H-18 Wheel	6.40	mg	ASTM D3389
Elastomers	Nominal Value	Unit	Test Method
Tensile Set (200% Strain)	6	%	ASTM D412
Tensile Stress (100% Strain, 0.0300 in)	406	psi	ASTM D412
Tensile Stress (300% Strain, 0.0300 in)	595	psi	ASTM D412
Tensile Strength (Break, 0.0300 in)	5500	psi	ASTM D412
Tensile Elongation (Break, 0.0300 in)	68	%	ASTM D412
Tear Strength ² (0.0300 in)	302	lbf/in	ASTM D624
Tear Strength (Split)	100	lbf/in	ASTM D470
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 5 sec)	72 to 78		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature	-22.0	°F	DSC
Melting Temperature	230	°F	DSC
Kofler Melting Temperature	212	°F	Internal Method

Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	129	°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.	331	°F
Cylinder Zone 2 Temp.	340	°F
Cylinder Zone 3 Temp.	349	°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