



Estane® 2355-85ABR TPU

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

Tuesday, November 5, 2019

General Information

Product Description

2355-85ABR is a thermoplastic polyurethane elastomer.

Feature: FDA and USDA compliance, Blend resin

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Uses	• Blending		
Agency Ratings	• FDA Unspecified Rating	• USDA Unspecified Approval	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.18		ASTM D792
Melt Mass-Flow Rate (190°C/8.7 kg)	52	g/10 min	ASTM D1238
Molding Shrinkage - Flow	1.0E-3 to 5.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow	4.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Taber Abrasion Resistance (1000 g, H-22 Wheel)	15.0	mg	ASTM D1044
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (50% Strain, 0.126 in)	798	psi	ASTM D412
Tensile Stress (100% Strain, 0.126 in)	856	psi	ASTM D412
Tensile Stress (300% Strain, 0.126 in)	1310	psi	ASTM D412
Tensile Strength (Break, 0.126 in)	4500	psi	ASTM D412
Tensile Elongation (Break, 0.126 in)	630	%	ASTM D412
Elongation Set After Break (0.126 in)	80	%	ASTM D412
Tear Strength ² (0.126 in)	450	lbf/in	ASTM D624
Compression Set			ASTM D395B
77°F, 22 hr	30	%	
158°F, 22 hr	75	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	87		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature	-32.8	°F	DSC
Vicat Softening Temperature	169	°F	ASTM D1525 ³
CLTE - Flow	8.9E-5	in/in/°F	ASTM D696

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180 to 199	°F
Processing (Melt) Temp	340 to 360	°F

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Injection	Nominal Value	Unit
Mold Temperature	61 to 140	°F

Injection Notes

Air Dew Point: <-40°C

Extrusion	Nominal Value	Unit
Drying Temperature	180 to 199	°F
Melt Temperature	331 to 360	°F

Extrusion Notes

Air Dew Point: <-40°C

Notes

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

² Die C

³ Rate B (120°C/h), Loading 1 (10 N)