

Technical Data

Product Description

Type: Estaloc® 59300 RETPU is a Polyester-Type Reinforced Engineered Thermoplastic (RETPU).

Features: Fast Cycling, Dimensional Stability, Durability, Aesthetics, Low Temperature Impact

Uses: Injection Molding

General

Material Status	• Commercial: Active		
UL Yellow Card ¹	• E106426-218377		
Search for UL Yellow Card	• Lubrizol Advanced Materials, Inc. • Estaloc™		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Filler		
Features	• Durable • Fast Molding Cycle	• Good Dimensional Stability • Good Surface Finish	• Low Temperature Impact Resistance
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Density / Specific Gravity	1.45 g/cm ³	ASTM D792
Molding Shrinkage		ASTM D955
Flow ³	0.10 %	
Flow ⁴	0.040 %	
Across Flow ³	0.10 %	

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus (0.762 mm)	3700 MPa	ASTM D638
Tensile Strength (0.762 mm)	83.0 MPa	ASTM D638
Tensile Elongation (Break, 0.762 mm)	20 %	ASTM D638
Flexural Modulus (0.762 mm)	2900 MPa	ASTM D790
Flexural Strength (0.762 mm)	90.0 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact		ASTM D256
-40°C, 0.762 mm	130 J/m	
23°C, 0.762 mm	430 J/m	

Hardness	Nominal Value Unit	Test Method
Durometer Hardness (Shore D, 5 sec)	72 to 78	ASTM D2240

Injection	Nominal Value Unit
Drying Temperature	104 °C
Drying Time	2.0 to 4.0 hr
Suggested Max Moisture	0.020 %
Rear Temperature	210 °C
Middle Temperature	221 °C
Front Temperature	224 °C
Nozzle Temperature	232 °C
Processing (Melt) Temp	232 °C
Injection Pressure	69.0 to 103 MPa
Injection Rate	Slow-Moderate
Holding Pressure	35.0 to 69.0 MPa



Estaloc™ 59300 RETPU

Thermoplastic Polyurethane Elastomer (Polyester)

Lubrizol Advanced Materials, Inc.

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Injection	Nominal Value Unit
Back Pressure	0.345 MPa
Screw Speed	30 to 80 rpm

Injection Notes

Air Dew Point: -40°C

Notes

¹ A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

² Typical properties: these are not to be construed as specifications.

³ Disc

⁴ Flex Bar



Estaloc™ 59300 RETPU

Thermoplastic Polyurethane Elastomer (Polyester)

Lubrizol Advanced Materials, Inc.

PROSPECTOR®

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Where to Buy

Supplier

Lubrizol Advanced Materials, Inc.

Cleveland, Cleveland USA

Telephone: 888-234-2436

Web: <http://www.lubrizol.com/>

Distributor

Entec Polymers

Telephone: 833-319-0299

Web: https://www.entecpolymers.com/?utm_source=ul&utm_medium=paid%20association&utm_campaign=entec%20%7C%20entec%20%201&utm_term=ul%20%7C%20where%20to%20buy

Availability: North America

Osterman & Company

Telephone: 800-914-4437

Web: <http://www.osterman-co.com/>

Availability: North America

