



Estaloc® 59600 RETPU

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

Wednesday, November 6, 2019

General Information

Product Description

Type: Estaloc® 59600 RETPU is a Polyester-Type Reinforced Engineered Thermoplastic (RETP).

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

Uses: Injection Molding

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Filler		
Features	• Durable • Fast Molding Cycle	• Good Dimensional Stability • Low Temperature Impact Resistance	• Pleasing Surface Appearance
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.66		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (0.0300 in)	797000	psi	ASTM D638
Tensile Strength (0.0300 in)	13900	psi	ASTM D638
Tensile Elongation (Break, 0.0300 in)	13	%	ASTM D638
Flexural Modulus (0.0300 in)	652000	psi	ASTM D790
Flexural Strength (0.0300 in)	18300	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°F, 0.0300 in	3.4	ft-lb/in	
73°F, 0.0300 in	8.0	ft-lb/in	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D, 5 sec)	77 to 83		ASTM D2240

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	219	°F
Drying Time	2.0 to 4.0	hr
Dew Point	-40	°F
Suggested Max Moisture	0.020	%
Rear Temperature	421	°F
Middle Temperature	441	°F
Front Temperature	460	°F
Nozzle Temperature	469	°F

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Injection	Nominal Value	Unit
Processing (Melt) Temp	469	°F
Injection Pressure	10000 to 14900	psi
Injection Rate	Slow-Moderate	
Holding Pressure	5080 to 10000	psi
Back Pressure	50.0	psi
Screw Speed	30 to 80	rpm

Notes

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