



Estane® D91F65D EXP

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

Tuesday, November 5, 2019

General Information

Product Description

Type: Aliphatic polycaprolactone based Thermoplastic Polyurethane (TPU) with a 65 Shore D Hardness.

Features: Clear resin with excellent colour stability upon UV exposure.

Uses: Cast film extrusion, profile extrusion and molding.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Aliphatic	• Good Color Stability	• Good Weather Resistance
Uses	• Cast Film	• Profiles	
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Cast Film	• Injection Molding	• Profile Extrusion

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.11	g/cm ³	ISO 2781
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	10 to 30	g/10 min	ISO 1133
Moisture Content	< 0.10	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress			ISO 527-2
--	4930 to 5370	psi	
100% Strain	2900 to 3190	psi	
300% Strain	4930 to 5370	psi	
Tensile Strain (Break)	250 to 300	%	ISO 527-2
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D, 3 sec)	65		ISO 868

Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	140	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Cylinder Zone 1 Temp.	338 to 356	°F
Cylinder Zone 2 Temp.	347 to 365	°F
Cylinder Zone 3 Temp.	356 to 374	°F
Cylinder Zone 4 Temp.	356 to 374	°F
Adapter Temperature	365 to 383	°F
Die Temperature	356 to 374	°F

Notes

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