

## Lubrizol ESTANE® 58237 Ether Based Thermoplastic Polyurethane

Category : Polymer , Thermoplastic , Elastomer, TPE , Polyurethane, TP , Thermoplastic Polyurethane, Elastomer, Ether Grade

### Material Notes:

Features: High moisture vapor transmission. Good physical properties and elasticity. Uses: Blown and flat die/cast film extrusion. Available in Americas, Europe, Middle East, Africa, India and Asia. Information provided by Lubrizol.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Lubrizol-ESTANE-58237-Ether-Based-Thermoplastic-Polyurethane.php](http://www.lookpolymers.com/polymer_Lubrizol-ESTANE-58237-Ether-Based-Thermoplastic-Polyurethane.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.22 g/cc	1.22 g/cc	ASTM D792
Water Vapor Transmission	500 g/m <sup>2</sup> /day	32.2 g/100 in <sup>2</sup> /day	50% RH; ASTM E96B
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Maximum Moisture Content	3000 g/m <sup>2</sup> /day	193 g/100 in <sup>2</sup> /day	90% RH; ASTM D6701
	@Temperature 38.0 °C	@Temperature 100 °F	
Linear Mold Shrinkage	0.0080 cm/cm	0.0080 in/in	flex bar, Injection
	0.0090 cm/cm	0.0090 in/in	disk, Injection

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	87 - 93	87 - 93	ASTM D2240
	@Time 5.00 sec	@Time 0.00139 hour	
Tensile Strength	34.5 MPa	5000 psi	ASTM D412
Elongation at Break	550 %	550 %	ASTM D412
100% Modulus	0.00620 GPa	0.899 ksi	ASTM D412
300% Modulus	0.0138 GPa	2.00 ksi	ASTM D412
Flexural Modulus	0.370 GPa	53.7 ksi	ASTM D790
Tear Strength	78.9 kN/m	450 pli	Trouser; ASTM D470
Graves Tear Strength	21.0 kN/m	120 pli	Die C; ASTM D624
Taber Abrasion, mg/1000 Cycles	40	40	H18, 1000g; ASTM D3389
Compression Set	42 %	42 %	ASTM D395
	@Temperature 23.0 °C, Time 79200 sec	@Temperature 73.4 °F, Time 22.0 hour	

Mechanical Properties	Metric	English	Comments
	@Temperature 70.0 °C, Time 79200 sec	@Temperature 158 °F, Time 22.0 hour	ASTM D395
Tensile Set	18 %	18 %	ASTM D412/D638
	18 %	18 %	200% elongation; ASTM D412

Thermal Properties	Metric	English	Comments
Melting Point	144 °C	291 °F	DSC
	155 °C	311 °F	Kofler
Glass Transition Temp, Tg	-24.0 °C	-11.2 °F	DSC

Processing Properties	Metric	English	Comments
Zone 1	177 °C	351 °F	Extrusion
Zone 2	182 °C	360 °F	Extrusion
Zone 3	188 °C	370 °F	Extrusion
Zone 4	193 °C	379 °F	Extrusion
Adapter Temperature	199 °C	390 °F	5, Extrusion
Die Temperature	199 °C	390 °F	Zone 1, Extrusion
	199 °C	390 °F	Zone 2, Extrusion
Drying Temperature	82.0 °C	180 °F	
Dry Time	2.00 - 4.00 hour	2.00 - 4.00 hour	
Dew Point	-40.0 °C	-40.0 °F	

Descriptive Properties	Value	Comments
Volume Swell in Water	40%	24h @ 23°C, ASTM D471

## Contact Songhan Plastic Technology Co.,Ltd.

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