

# Estane® ZHF 85AT8 NAT01

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

Wednesday, November 6, 2019

### **General Information**

#### **Product Description**

Type: ESTANE® ZHF85AT8 NAT01 is a non halogen, flame retardant aromatic polyether-based thermoplastic polyurethane.

Application: Extrusion

General				
Material Status	Commercial: Active			
Availability	<ul><li> Africa &amp; Middle East</li><li> Asia Pacific</li></ul>	<ul><li>Europe</li><li>Latin America</li></ul>	North America	
Features	Aromatic	Flame Retardant	Halogen Free	
Appearance	<ul> <li>Natural Color</li> </ul>			
Forms	• Pellets			
Processing Method	<ul> <li>Extrusion</li> </ul>			

ASTM & ISO Properties <sup>1</sup>				
Physical	Nominal Value	Unit	Test Method	
Density	1.13	g/cm³	ISO 2781	
Mechanical	Nominal Value	Unit	Test Method	
Tensile Stress			ISO 527-2/5A/200	
-	6530	psi		
50% Strain	580	psi		
100% Strain	725	psi		
300% Strain	1310	psi		
Tensile Strain (Break)	530	%	ISO 527-2/5A/200	
Abrasion Resistance	36.0	mm³	ISO 4649-A	
Elastomers	Nominal Value	Unit	Test Method	
Tear Strength <sup>2</sup>	280	lbf/in	ISO 34-1	
Hardness	Nominal Value	Unit	Test Method	
Shore Hardness (Shore A, 1 sec)	82		ISO 868	
Thermal	Nominal Value	Unit	Test Method	
Vicat Softening Temperature	169	°F	ISO 306	
Flammability	Nominal Value	Unit	Test Method	
Flame Rating	V-2		UL 94	
Oxygen Index	25	%	ASTM D2863	

Processing Information			
Extrusion	Nominal Value L	Unit	
Drying Temperature	176 °	°F	
Drying Time	3.0 to 4.0 h	hr	
Cylinder Zone 1 Temp.	392 °	°F	
Cylinder Zone 2 Temp.	401 °	°F	
Cylinder Zone 3 Temp.	401 °	°F	
Cylinder Zone 4 Temp.	392 °	°F	
Adapter Temperature	392 °	°F	



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Extrusion	Nominal Value Unit
Die Temperature	383 °F

#### **Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.



<sup>&</sup>lt;sup>2</sup> Method Bb, Angle (Nicked)