



## Estane® ZHF 90AT8 NAT 02 EXP

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

Wednesday, November 6, 2019

### General Information

#### Product Description

Type: ESTANE® ZHF 90AT8 NAT 02 EXP is a non-halogen, flame retardant, aromatic polyether-based thermoplastic polyurethane.

Application: Extrusion

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Aromatic	• Flame Retardant	• Halogen Free
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion		

### ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.23	g/cm <sup>3</sup>	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress <sup>2</sup>			Internal Method
--	4210	psi	
100% Strain	1160	psi	
300% Strain	1600	psi	
Tensile Strain <sup>2</sup> (Break)	510	%	Internal Method
Abrasion Resistance	38.0	mm <sup>3</sup>	ISO 4649-A
Elastomers	Nominal Value	Unit	Test Method
Tear Strength <sup>3</sup>	314	lbf/in	ISO 34-1
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore A, 1 sec)	89		ISO 868
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.12 in)	V-0		UL 94
Oxygen Index	24	%	ASTM D2863

### Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	212	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Cylinder Zone 1 Temp.	374	°F
Cylinder Zone 2 Temp.	383	°F
Cylinder Zone 3 Temp.	392	°F
Cylinder Zone 4 Temp.	392	°F
Adapter Temperature	392	°F
Die Temperature	392	°F

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## Notes

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

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<sup>2</sup> VDE282 part 10

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<sup>3</sup> Method Bb, Angle (Nicked)