



Estane® ZHF 90AT8H NAT 02 EXP

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

Wednesday, November 6, 2019

General Information

Product Description

Type: ESTANE® ZHF 90AT8H 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	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Aromatic	• Flame Retardant	• Halogen Free
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.21	g/cm ³	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress ²			Internal Method
--	3920	psi	
100% Strain	1020	psi	
300% Strain	1450	psi	
Tensile Strain ² (Break)	520	%	Internal Method
Abrasion Resistance	36.0	mm ³	ISO 4649-A
Elastomers	Nominal Value	Unit	Test Method
Tear Strength ³	303	lbf/in	ISO 34-1
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore A, 1 sec)	87		ISO 868
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.031 in)	V-0		UL 94
Oxygen Index	25	%	ASTM D2863

Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	212	°F
Drying Time	3.0	hr
Suggested Max Moisture	0.020	%
Cylinder Zone 1 Temp.	410	°F
Cylinder Zone 2 Temp.	410	°F
Cylinder Zone 3 Temp.	401	°F
Cylinder Zone 4 Temp.	401	°F
Adapter Temperature	401	°F
Die Temperature	392	°F

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Notes

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

² VDE282 part 10

³ Method Bb, Angle (Nicked)