Estane® ZHF 58202 NAT02

Wednesday, November 6, 2019

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

General Information

Product Description

Type: ESTANE® ZHF 58202 NAT 02 is a non halogen, flame retardant, aromatic polyether-based thermoplastic polyurethane (TPU).

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 [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.23		ASTM D792
Density	1.23	g/cm³	ISO 2781
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress			ISO 527-2
--	4060	psi	
50% Strain	1020	psi	
100% Strain	1160	psi	
300% Strain	1450	psi	
Tensile Strain (Break)	630	%	ISO 527-2
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (50% Strain)	1020	psi	ASTM D412
Tensile Stress (100% Strain)	1160	psi	ASTM D412
Tensile Stress (300% Strain)	1450	psi	ASTM D412
Tensile Strength	4060	psi	ASTM D412
Tensile Elongation (Break)	630	%	ASTM D412
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore A, 1 sec)	91		ASTM D2240
Shore Hardness (Shore A, 1 sec)	91		ISO 868
Flammability	**Nominal Value**	**Unit**	**Test Method**
Oxygen Index	25	%	ASTM D2863
Smoke Density			ASTM E662
Flaming DM : 29.5 mil	110		
Non Flaming DM : 29.5 mil	52		

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Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	212	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Cylinder Zone 1 Temp.	365	°F
Cylinder Zone 2 Temp.	374	°F
Cylinder Zone 3 Temp.	383	°F
Cylinder Zone 4 Temp.	383	°F
Adapter Temperature	383	°F
Die Temperature	374	°F

Notes

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