

Technical Data Sheet

Type: ESTANE® ZHF 90AT8L NAT 01 EXP is a non-halogen, flame retardant, aromatic polyether-based thermoplastic polyurethane.

Application: Extrusion

Physical Properties	Value (Metric)	Unit	Test Method
Hardness	A/1: 88	Shore A	ISO 868
Specific Gravity	1.21	g/cm ³	ISO 1183
Tensile Strength	34	MPa	VDE282 part 10
Ultimate Elongation	511	%	VDE282 part 10
Tensile Stress at:			
- 100 % Elongation	7	MPa	VDE282 part 10
- 300 % Elongation	11	MPa	VDE282 part 10
Abrasion Loss	36	mm ³	ISO 4649-A
Tear Strength nicked	51	kN/m	ISO 34-1B

- Based on extruded strips
- Prior to testing samples were conditioned at 23°C for 24 hours
- Listed values are "typical (average) values" and should/can not be applied for specification purposes.

Application Specific Properties	Value (Metric)	Unit	Test Method
UL Flame Rating	V2-2 mm	-	UL-94
LOI	25	%	ASTM D-2863
Smoke Density (0.75 mm)		Flaming DM Non flaming DM	ASTM E662

Supply Form and Standard Packaging

- ESTANE® ZHF 90AT8L NAT 01 EXP is supplied in pellet form and packaged in 25 kg (x lb) bags or 700-800 kg boxes (x-y lbs).

Material Preparation

- Prior to processing, ESTANE® ZHF 90AT8L NAT 01 EXP must be dried at 100°C for 3 hours.
- It is recommended to dry the material in a vacuum or dehumidifying type dryer. Target dew point should be -40°C.
- Depending on the applied processing technique, the maximum moisture level should be 0.02%.

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Material Preparation

- ESTANE® ZHF 90AT8L NAT 01 EXP can be processed on any conventional extruder:

Recommended EXTRUSION Temperature Profile:

	°C
Zone 1	210
Zone 2	210
Zone 3	205
Zone 4	205
Adapter (5)	205
Die Zone 1 (6)	200
Die Zone 2	200

For further information refer to Lubrizol Advanced Materials processing guides.

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