

Provisional Technical Data Sheet

Technical Data Sheet

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

Application: Extrusion

Physical Properties	Value (Metric)	Unit	Test Method
Hardness (1 sec)	91	ShA	ISO 868 (ASTM D-2240)
Specific Gravity	1.23	g/cm3	ISO 2781 (ASTM D-792)
Tensile Strength	28	MPa	ISO 527 (ASTM D-412)
Elongation @ break	632	%	ISO 527 (ASTM D-412)
Modulus @ 50%	7	MPa	ISO 527 (ASTM D-412)
Modulus @ 100%	8	MPa	ISO 527 (ASTM D-412)
Modulus @ 300%	10	MPa	ISO 527 (ASTM D-412)

- These are typical values & should not be used for establishing specifications.
- Based on extruded strips.

Application Specific Properties	Value (Metric)	Unit	Test Method
UL Flame Rating	0	-	UL-94
LOI	25	%	ASTM D-2863
Smoke Density (0.75 mm)	113 52	Flaming DM Non flaming DM	ASTM E662

Material Preparation

- Prior to processing, **ZHF58202 NAT02** must be dried at 100°C for 4 hours.
- It is recommended to dry the material in a dehumidifying type dryer. Target dew point should be **-40°C**.
- Depending on the applied processing technique, the maximum moisture level should be 0.02%.

Material Preparation

- **ZHF58202 NAT02** can be processed on any conventional extruder.

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Recommended EXTRUSION Temperature Profile:

	°C
Zone 1	185
Zone 2	190
Zone 3	195
Zone 4	195
Adapter (5)	195
Die Zone 1 (6)	190
Die Zone 2	185

Storage

ZHF58202 NAT02 must be stored in a cool (15-25°C) and dry place. Standard Practice of consuming resin first-in first-out basis should be employed. Contact your account manager for specific information related to shelf life.

For further information refer to Lubrizol Advanced Materials processing guides.

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