

Technical Data Sheet

Type: ESTANE® EV 89AT9 NAT 03 is a non-halogen, flame retardant, aromatic polyether-based thermoplastic polyurethane.

Main application: Extrusion

Physical Properties	Value (Metric)	Unit	Test Method
Hardness	A/1: 89	Shore A	ISO 868
Tensile strength	34.7	MPa	VDE282 part 10
50% modulus	6.8	MPa	VDE282 part 10
100% modulus	7.7	MPa	VDE282 part 10
300% modulus	10.6	MPa	VDE282 part 10
Elongation	567	%	VDE282 part 10
Tear Resistance (Nicked)	67	kN/m	ISO 34-1B
Density	1.231	g/cm ³	ISO 1183
Vicat A50	85.6	°C	ISO 306
Abrasion resistance	54	mm ³	ISO 4649-A
Vertical burn test	V2 (2mm)	/	UL-94
L.O.I.	24	%	ASTM D-2863

* These are typical values & should not be used for establishing specifications.

* Based on extruded strips

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Material Preparation

- Prior to processing, **ESTANE[®] EV 89AT9 NAT 03** be dried at **100°C** for 3-4 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%
- **ESTANE[®] EV 89AT9 NAT 03** can be processed on any conventional extruder.

Recommended Starting EXTRUSION Temperature Profile:

	°C
Zone 1	195
Zone 2	190
Zone 3	185
Zone 4	180
Adapter (5)	180
Die Zone 1 (6)	170
Die Zone 2	170

Storage

ESTANE[®] EV 89AT9 NAT 03 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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