

Technical Data Sheet

Type: Estane® ZHF 82AT3 is 82A aromatic Polyether-Based, Non-Halogen Flame Retardant, Thermoplastic Polyurethane (TPU) Compound

Description: Soft, Matte finished, Non-Halogen flame retardant

Uses: Wire and cable and general extrusion where flame retardant properties are required

Physical Properties	Value (Metric)	Unit	Test Method
Hardness (5 sec)	82+/- 2	Shore A	ISO 868
Specific Gravity	1.13	g/mm ³	ISO 2781
Tensile Strength	24.5	Mpa	ISO 527
Ultimate Elongation	620	%	ISO 527
Tensile Stress at			
100% Elongation	4.9	Mpa	ISO 527
300% Elongation	8.2	Mpa	ISO 527
Tear Strength(Die C)			
Nicked	50.1	KN/m	ISO 34-1B
Un-nicked	101.1	KN/m	ISO 34-1B

- Prior to testing samples were conditioned at 23°C for 48 hours.
- Physical property test are based on 2mm molding plaques
- Please be aware that the listed data is a "typical data" which should / cannot be applied for specification purpose

Application Specific Properties	Value (Metric)	Unit	Test Method
UL Flame Rating	V-2	-	UL-94

Materials Preparation:

Prior to process, Estane ZHF 82AT3 must be dried below 105°C for 3 hours. It is recommended to dry these materials in a dehumidifier, target dew point to be -30°C, preferable – 40°C.

Depending on the process technique, the maximum moisture content is recommended < 0.02%.

Process Condition:

Estane ZHF 82AT3 is extruded on any conventional extruder equipped with a PVC, 3 stage or barrier type screw having an L/D ration of 25:1 and a compression ratio of 3:1

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Recommended Starting Extrusion Temperature Profile:

	°C
Zone 1	160
Zone 2	170
Zone 3	175
Zone 4	180
Adapter	180
Die zone 1	175
Dip zone 2	170

For further information refer to Lubrizol Advanced Materials processing guides.

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