

Technical Data Sheet

Type: ESTANE® RNW90 58300 NAT 036 is an aromatic polyether-based thermoplastic polyurethane

Main application: Extrusion

Uses:

Physical Properties*	Value (Metric)**	Unit	Test Method
Hardness	A/1: 82	Shore A/D	ISO 868
Specific Gravity	1.10	g/cm ³	ISO 2781
Tensile Strength	32	MPa	ISO 527-2/5A/500
Ultimate Elongation	670	%	ISO 527-2/5A/500
Tensile Stress at:			
50 % Elongation	4	MPa	ISO 527-2/5A/500
100 % Elongation	5	MPa	ISO 527-2/5A/500
300 % Elongation	8	MPa	ISO 527-2/5A/500
Tear Strength nicked	40	kN/m	ISO 34-1B
Abrasion Resistance	34	mm ³	ISO 4649-A
Vicat Softening Point	65	°C	ISO 306 (A50)

**Based on extruded strips*

***Listed values are "typical (average) values" and should /cannot be applied for specification purposes*

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Material Preparation

Prior to processing, **ESTANE® RNW90 58300 NAT036** must be dried at **80°C** for 3-4 hours. It is recommended to dry the material in a dehumidifying type dryer. Target dew point should be **-40°C**.

Recommended Starting Extrusion Temperature Profile*:

	°C
Hopper cooling	Yes
Zone 1	175
Zone 2	180
Zone 3	185
Zone 4	180
Adapter (5)	180
Die (6)	180
Die TIP (7)	175

*For further information refer to Lubrizol Advanced Materials processing guides.

Sustainability Passport

Sustainability property	Value (Metric)	Unit
Sustainable source	Bio-circular	
Sustainable share	92	%
PCF reduction (Indicative value)	51	%
ISCC Plus certified	Yes	

Sustainability Glossary:

Sustainable source: defines the type of sustainable raw material used to achieve the PCF reduction. This can be: Bio, Bio-circular, Circular

Sustainable share: This represents the amount of sustainably sourced raw materials (renewable carbon) used in the formulation of the product.

PCF reduction: This information provides a relative comparison of Product Carbon Footprint (PCF) between the fossil-based product and the sustainable counterpart. This is an estimated value.

ESTANE® RNW TPU: Attributed renewable carbon is included in the product. The (bio)**mass balance** concept is used to attribute the share of renewable carbon in the formulation. The PCF reduction is carried through the supply chain by means of ISCC plus external certification. The renewable carbon can come from

- **Bio-feedstock** (primary bio feedstock in the beginning of the value chain)
- **Bio-circular** feedstock (bio-waste used as feedstock at the beginning of the value chain)
- **Circular** feedstock (circular feedstock used at the beginning of the value chain)

Contact your account manager for more details.

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