

TECHNICAL DATA SHEET

ReForm rTPU 85A

Date of issue: 29-09-2025 / Date of update: 29-09-2025



ReForm rTPU 85A Filament – Flexible & Sustainable TPU Filament for 3D Printing

ReForm rTPU 85A is the softest and most flexible rTPU filament in our ReForm rTPU product line. This recycled TPU filament is engineered for maximum elasticity and resilience and delivers an outstanding balance between durability, flexibility, and printability.

ReForm rTPU 85A is ideal for producing shock-absorbing, abrasion-resistant, and highly elastic 3D printed parts. Even under continuous mechanical stress and long-term use, your prints will remain strong, flexible, and reliable.

The Sustainable Choice in TPU 3D Printing Filaments

ReForm rTPU 85A is manufactured using almost 100% post-industrial recycled TPU, sourced responsibly from European chemical industries. By reclaiming overproduction, off-grade materials, and production waste, and enhancing them with tailored additives, we deliver a high-performance recycled TPU filament optimized for 3D printing applications.

This makes ReForm rTPU 85A the eco-friendly alternative to virgin TPU filaments—delivering the same premium quality while reducing environmental impact.

Important key features of ReForm rTPU 85A

- Made with nearly 100% recycled TPU from certified and traceable European sources.
- Highly flexible and elastic with a shore hardness of 85A.
- Superior shock absorption and vibration damping.
- Exceptional abrasion resistance and resilience.
- Outstanding mechanical performance for demanding applications.

Suitable applications for ReForm rTPU 85A

- **Footwear components** – midsoles, insoles, and cushioning parts.
- **Orthopedic models & braces** – soft but sturdy for patient comfort.
- **Protective covers & grips** – safe, flexible, and skin-friendly.
- **Seals, gaskets, and O-rings** – flexible, abrasion-resistant, and resilient under stress.
- **Shock absorbers & vibration dampers** – for machinery, robotics, or automotive parts.
- **Protective bumpers** – cushioning and impact resistance.

Recommended print settings for ReForm rTPU 85A

Nozzle temp: ± 220 - 250°C

Heat bed: ± 60 - 80°C

Fan speed: ± 30 - 100%

Print speed: ± 20 - 60 mm/s

Nozzle: ≥ 0.15mm

Buildplate adhesion: EasyFix Nr. I

Drying: 24 hours @ ~50-70 °C

Drybox: Yes

Enclosure: Not necessary

Experience level: Intermediate

Material properties

Specific Gravity (23°C)

Typical value

1,21 g/cm³

Test Method

ISO 1183-1

Mechanical properties

Tensile strength

28 MPa

ASTM D638

Tear strength

52 N/mm

ISO 34-1

Elongation at break

355%

DIN 53504-S2

Shore A hardness

85A

ISO 7619-1

Thermal properties

Heat resistance

74 °C

DSC

Melting Point

165 °C

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Buildplate adhesion

For optimal buildplate adhesion we recommend to use our EasyFix Adhesive – Nr. I.

Storage and handling

Filament should be stored at room temperature in a dry and dark place with humidity below 15%. Recommended storage temperature is ca. 18-25°C (64.4 -77.0°F). Keep out of moisture, sunlight and direct heat. When stored properly, product has a shelf life of 24 months. To obtain the best parameters of the printed object, it is recommended to dry the material prior to usage and to 3D print it directly from a dry box.

Product export information

HS Code	Description	Origin
39169090	Monofilament for 3D printing	European Union

Packaging & Logistics Information

Material	Spool weight	Spools per master box	Spools per EURO pallet
ReForm rTPU 85A	1,000 g (1 kg)	10	400
ReForm rTPU 85A	2,300 g (2.3 kg)	5	120
ReForm rTPU 85A	4,500 g (4.5 kg)	1	90
ReForm rTPU 85A	8,000 g (8 kg)	1	60

Disclaimer

The product and technical data provided in this datasheet are correct to the best of FormFutura BV's knowledge and are intended solely for reference and comparison purposes. Actual values may vary depending on printing conditions, model complexity, environmental factors, and other variables. Typical values are indicative only and do not constitute binding specifications.

All other information supplied, including that contained herein, is believed to be accurate but is provided on the express condition that the customer is responsible for making its own assessment to determine the product's suitability for a particular purpose.

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