

The image shows a close-up of industrial machinery. It features several curved, grey metal frames that hold blue, perforated belts. The belts have a grid-like pattern of small holes. The machinery is set against a dark background, and the lighting highlights the texture of the belts and the metallic surfaces.

EMEAI Product Selection Guide

# TPU FOR BELTS AND PROFILES

*Lubrizol*

Engineered Polymers

# TPU (THERMOPLASTIC POLYURETHANE) FOR BELTS AND PROFILES

Grades	TPU Polyol Type	Hardness ISO 868 (Shore A/D)	Key benefits	Tensile Strength ISO 527-2/5A/500 (MPa)	Elongation at break (%) ISO 527-2/5A/500 (%)	Tear Resistance ISO 34-1B (kN/m)		Minimum Extrusion Temperature (°C)	MFI ISO 1133 (g/10 min)	MFI Conditions	TG (°C)	Main Applications
						Nicked	Unnicked					
<b>ESTANE® E855AB3 EXP</b>	Polyester	55A	Ultra soft / High grip / No plasticizers	22	1000	-	48	195-205	15-35	190°C/8.7 kg	-40	High grip belts and films
<b>ESTANE® 58271 NAT 021</b>	Polyester	86A	Wide processing window, Transparency	42	650	60	-	180	15-25	190°C/8.7 kg	-25	Profiles
<b>PEARLTHANE™ MAXI 12T85E</b>	Polyester	86A	Low-temperature flexibility, High-melt strength	42	580	-	108	185-195	10-25	210°C/3.8 kg	-45	Drive belts and profiles
<b>ESTANE® 58206 NAT 033</b>	Polyester	87A	Good mechanical and chemical properties, High-melt strength	46	600	70	-	190	8-22	210°C/3.8 kg	-40	Drive belts and profiles
<b>PEARLTHANE™ 12T92E</b>	Polyester	91A	High-melt strength, Hydrolytic stabilized	39	500	-	112	195-205	70-95	220°C/3.8 kg	-40	Timing belts
<b>ESTANE® 58277 NAT 021</b>	Polyester	93A/49D	Wide processing window, chemical and abrasion resistance	47	550	100	-	185	10-20	190°C/8.7 kg	-15	Profiles
<b>ESTANE® 58246 NAT 040</b>	Polyester	95A/50D	High stiffness grade with excellent chemical and oil resistance	57	420	-	123	210	10-25	210°C/3.8 kg	-22	Monolithic belts
<b>ESTANE® 58887 NAT 055</b>	Polyether	89A	Low-temp. flexibility, Very good hydrolysis and microbial resistance	47	570	65	-	185	25-35	210°C/3.8 kg	-45	Elevator belts and profiles
<b>ESTANE® 58887 NAT 037</b>	Polyether	89A	Improved adhesion / Low-temp. flex. / Very good hydrolysis & microbial resist.	47	570	65	-	185	15-30	210°C/3.8 kg	-45	Elevator belts
<b>ESTANE® ETE 90AB3 NAT 01</b>	Polyester	90A	High-melt strength, Food approved	40	500	112	-	195-210	70-95	220°C/3.8 kg	-40	Food belts
<b>PEARLTHANE™ 11T85E</b>	Polycaprolactone	86A	Good transparency, Good hydrolysis resistance	35	650	-	90	185-195	55-90	220°C/3.8 kg	-40	Timing belts and profiles
<b>PEARLTHANE™ 11T92E</b>	Polycaprolactone	93A	Good transparency, Good hydrolysis resistance	42	560	-	130	195-205	55-90	220°C/3.8 kg	-34	Timing belts and profiles
<b>PEARLTHANE™ 11T98</b>	Polycaprolactone	98A/52D	Outstanding transparency, Hardness & processability balance	40	470	-	175	180-195	55-80	230°C/2.16 kg	-30	Timing belts and profiles
<b>PEARLTHANE™ CLEAR 15N80</b>	Polyether Copolymer	82A	Outstanding transparency, Low-temperature flexibility	35	740	-	80	180-195	25-45	210°C/3.8 kg	-55	Profiles
<b>PEARLTHANE™ CLEAR 15N85</b>	Polyether Copolymer	86A	Outstanding transparency, Low-temperature flexibility	35	660	-	95	185-200	24-45	210°C/3.8 kg	-50	Profiles
<b>ESTANE® TS 92AP7 NAT 055</b>	Polycarbonate	93A	High heat, hydrolysis and chemical resistance	60	375	103	-	205	15-30	210°C/3.8 kg	-22	High-heat belts

For information on EU and/or FDA food contact compliance, please contact Lubrizol Customer Assistance

All products may be available, upon request, in powder form as per below:

Maximum Particle Size of powder in µm (100%)	<106	<250	<355	<500
Grade	S	X	F	L

Bio TPU by Lubrizol (ESTANE ECO TPU) and biomass balance (ESTANE RNW TPU) products complement the offering for belts and profiles, please contact your local representative for more information.



## LUBRIZOL GLOBAL PRESENCE

Our global presence means we have the application and development laboratories (with technical service ability) already in place, as well as worldwide production capabilities and renowned customer service. We are also a specialty producer of performance coatings and other unique products for apparel. Teaming with Lubrizol simplifies a complex global supply chain.

### AMERICAS

Lubrizol Advanced Materials, Inc.  
9911 Brecksville Road  
Cleveland, Ohio 44141-3201  
USA Phone: +1 216 447 5000

### ASIA

Lubrizol Specialty Chemicals  
Manufacturing (Shanghai) Co., Ltd.  
6F, No.3, Building C,  
Lane 227 Dongyu Road  
Pudong New District, Shanghai,  
PRC 200126  
Phone: +86 21 3866 0366

### EUROPE, MIDDLE EAST, INDIA & AFRICA

Lubrizol Advanced Materials  
Spain S.L. Gran Vial, no. 17  
08160 Montmeló (Barcelona)  
Spain  
Phone: +34 93 579 9522



**Lubrizol**

**Engineered Polymers**

THE SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation, nor as an inducement to practice any patented invention without permission of the patent owner.

©2024 The Lubrizol Corporation. All rights reserved. All marks are the property of The Lubrizol Corporation. EU-BP-022024



contact us at  
[go.lubrizol.com/EP](https://go.lubrizol.com/EP)