

## TPU FOR BELTS AND PROFILES EMEAI PRODUCT SELECTION GUIDE



## **ADVANCING MATERIALS. ELEVATING PERFORMANCE.**

# TPU (THERMOPLASTIC POLYURETHANE) FOR BELTS AND PROFILES

G	irades	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)
E	STANE® E855AB3 EXP	Polyester	55A	Ultra soft / High grip / No plasticizers	22	1000	48**	195-205	15-35
E	STANE <sup>®</sup> 58271 NAT 021	Polyester	86A	Wide processing window, Transparency	42	650	60*	180	15-25
F	Pearlthane™ MAXI 12T85E	Polyester	86A	Low-temperature flexibility, High-melt strength	42	580	108**	185-195	10-25
E	STANE <sup>®</sup> 58206 NAT 033	Polyester	87A	Good mechanical and chemical properties, High-melt strength	46	600	70*	190	8-22
F	Pearlthane <sup>™</sup> 12T92E	Polyester	91A	High-melt strength, Hydrolytic stabilized	39	500	112**	195-205	70-95
E	STANE <sup>®</sup> 58277 NAT 021	Polyester	93A/49D	Wide processing window, chemical and abrasion resistance	47	550	100*	185	10-20
E	STANE <sup>®</sup> 58246 NAT 040	Polyester	95A/50D	High stiffness grade with excellent chemical and oil resistance	57	420	123**	210	10-25
E	STANE <sup>®</sup> 58887 NAT 055	Polyether	89A	Low-temp. flexibility, Very good hydrolysis and microbial resistance	47	570	65*	185	25-35
E	STANE <sup>®</sup> 58887 NAT 037	Polyether	89A	Improved adhesion / Low-temp. flex. / Very good hydrolysis & microbial resist.	47	570	65*	185	15-30
E	STANE <sup>®</sup> ETE 90AB3 NAT 01	Polyester	90A	High-melt strength, Food approved	40	500	112*	195-210	70-95
F	Pearlthane™ 11T85E	Polycaprolactone Copolyester	86A	Good transparency, Good hydrolysis resistance	35	650	90**	185-195	55-90
F	Pearlthane™ 11T92E	Polycaprolactone Copolyester	93A	Good transparency, Good hydrolysis resistance	42	560	130**	195-205	55-90
F	Pearlthane™ 11T98	Polycaprolactone Copolyester	98A/52D	Outstanding transparency, Hardness & processability balance	40	470	175**	180-195	55-80
F	Pearlthane™ CLEAR 15N80	Polyether Copolymer	82A	Outstanding transparency, Low-temperature flexibility	35	740	80**	180-195	25-45
F	Pearlthane™ CLEAR 15N85	Polyether Copolymer	86A	Outstanding transparency, Low-temperature flexibility	35	660	95**	185-200	24-45
E	STANE <sup>®</sup> TS 92AP7 NAT 055	Polycarbonate	93A	High heat, hydrolysis and chemical resistance	60	375	103*	205	15-30

\* Nicked / \*\* Unnicked

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 Grade

MFI Conditions	ТG (°С)	Main Applications
190°C/8.7 Kg	-40	High grip belts and films
190°C/8.7 Kg	-25	Profiles
210°C/3.8 Kg	-45	Drive belts and profiles
210°C/3.8 Kg	-40	Drive belts and profiles
220°C/3.8 Kg	-40	Timing belts
190°C/8.7 Kg	-15	Profiles
210°C/3.8 kg	-22	Monolithic belts
210°C/3.8 Kg	-45	Elevator belts and profiles
210°C/3.8 Kg	-45	Elevator belts
220°C/3.8 Kg	-40	Food belts
220°C/3.8 Kg	-40	Timing belts and profiles
220°C/3.8 Kg	-34	Timing belts and profiles
230°C/2.16 Kg	-30	Timing belts and profiles
210°C/3.8 Kg	-55	Profiles
210°C/3.8 Kg	-50	Profiles
210°C/3.8 kg	-22	High-heat belts

ze of powder in µm (100%)	<106	<250	<355	<500	
	S	Х	F	L	

Bio TPU<sup>™</sup> by Lubrizol products complement the offering for belts and profiles, please contact your local representative for more information. Bio-based content as certified in accordance with ASTM D-6866.

## 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.

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