



Lubrizol

**PEARLSTICK™ TPU
FOR INKS, BINDERS
AND LACQUERS
PRODUCT
SELECTION
GUIDE**

LUBRIZOL
ENGINEERED
POLYMERS

**ADVANCING MATERIALS.
ELEVATING PERFORMANCE.**

TPU (THERMOPLASTIC POLYURETHANE) TO BE DISSOLVED FOR INK, BINDER, SYNTHETIC LEATHER & TIE COATS

IDENTIFICATION	SOLUBILITY	SOLUTION VISCOSITY	MELTING BEHAVIOR	SETTING	PHYSICAL PROPERTIES (ASTM D412)					RESISTANCE TO					APPLICATION									
					TPU Polyol type	Hardness (Shore A/D) (ASTM D2240)	Methylethylketone (MEK)	Acetone	Ethyl acetate	Dimethylformamide (DMF)	Tetrahydrofuran (THF)	DMF /MEK 1/1	15% s.c. in MEK (mPa-s)	Minimum heat activation Temperature (°C) (LA-17 method)	DSC Tg Temperature (°C)* (ASTM D7426)	DSC Tcr rate (ASTM E794)	Tensile strength at break (MPa)	Tensile strength at 50% elongation (MPa)	Ultimate elongation (%)	Tear resistance (KN/m)	Wash at 60°C	Dry clean	Steam	Laquers
Pearlstick™ 5737	Polyether	90A	N	N	N	Y	Y	N	500-1200*	-	-11	Slow	39	5.1	410	60	VG	G	G		√	√		√
Pearlbond™ ECO 590	Polyester	52D	N	N	N	N	N	N	50-200**	70	-40	Extremely fast	12	2	550	NA	F	NR	NR	√	√	√	√	
Pearlbond™ 5735	Polyester	84A	Y	Y	Y	Y	Y	Y	360-700	70	-30	Slow	45	3	670	55	F	NR	NR			√		√
Pearlstick™ 5703	Polyester	70A	Y	Y	N	Y	Y	Y	180-300	72	-30	Slow	43	2	798	40	F	F	NR			√		
Pearlstick™ 5702 F3	Polyester	65A	Y	Y	Y	Y	Y	Y	180-460	75	-32	Slow	31	2	861	45	F	F	NR			√		
Pearlbond™ DIPP 119	PCL***	70A	Y	Y	N	Y	Y	Y	50-120	80	-30	Moderate	12	2.6	800	NA	G	NR	NR			√	√	√
Pearlstick™ 5715 F1	Polyester	95A	Y	Y	N	Y	Y	Y	30-60	85	+20	Slow	22	6	290	75	F	NR	NR			√		√
Pearlstick™ 5715 F2	Polyester	95A	Y	Y	N	Y	Y	Y	20-40	88	+20	Slow	18	4	350	70	F	NR	NR			√		√
Pearlstick™ 5778	Polyester	78D	Y	Y	Y	Y	Y	Y	30-70	89	+30	Slow	28.5	16.9	229	NA	G	NR	NR	√	√			√
Pearlstick™ 5715	Polyester	95A	Y	Y	N	Y	Y	Y	40-90	92	+20	Slow	39	7	370	75	F	NR	NR	√	√			√
Pearlstick™ 5719	Polyester	82A	Y	Y	N	Y	Y	Y	200-500	120	+10	Slow	37	2.5	341	60	F	NR	NR	√				√
Pearlstick™ 5701 F51	Polyester	85A	N	N	N	Y	Y	Y	90-200	123	-29	Slow	22	4.6	614	75	F	F	F				√	√
Pearlstick™ 5701 F1	Polyester	86A	N	N	N	Y	Y	Y	300-700*	125	-28	Slow	37	4.4	405	85	G	G	F			√	√	
Pearlstick™ 5714 F1	Polyether	80A	N	N	N	Y	Y	Y	950-1350*	142	-40	Moderate	39	4	575	75	VG	G	G			√		√
Pearlbond™ 12F75UV	Polyester	78A	N	N	N	Y	Y	Y	400-700*	145	-30	Slow	30	4	525	NA	G	NR	G			√	√	√
Pearlbond™ 125H	Polyester	85A	N	N	N	Y	Y	Y	100-400*	145	-32	Slow	18	4	520	NA	G	NR	G			√	√	√
Pearlstick™ 5707 F1	Polyester	93A	N	N	N	Y	Y	Y	600-1300*	152	-10	Moderate	30	7.6	320	120	VG	G	G			√		
Pearlstick™ 5708 F4	Polyester	86A	N	N	N	Y	Y	Y	700-1000*	170	-45	Moderate	26	5	407	120	NR	F	F				√	

VG - Very Good
 G - Good
 F - Fair
 NR - Not recommended

*15% t.s. in DMF **15% t.s. in Xilene ***PCL= Polycaprolactone Copolyester

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
USAPhone: +1 888 234 2436

Asia

Lubrizol Specialty Chemicals (Shanghai) Co., Ltd.
10F, Park Center International
1088 Fang Dian Road
Shanghai PRC 201204
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
Technology Center – Adhesives



To learn more, contact us at engineeredpolymers@lubrizol.com
or visit www.lubrizol.com/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.

© 2018 The Lubrizol Corporation. All rights reserved.
All marks are the property of The Lubrizol Corporation.
GL-IS-012018



contact us at
<http://go.lubrizol.com/EP>

Lubrizol