

A woman wearing a bright red, double-breasted coat with large black buttons. She is holding a black, textured handbag with a circular gold-colored detail on the front. She is also wearing black high-heeled shoes with ankle straps. The background is a solid teal color.

Product Selection Guide

PEARLSTICK™ TPU FOR INKS, BINDERS AND LACQUERS

Lubrizol

Engineered Polymers

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				
Grades	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)**	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	Ink	Primers	Synthetic leather	Binders
PEARLBOND™ DIPP 119	PCL*	70A	Y	Y	N	Y	Y	Y	50-120	80	-30	Moderate	12	2.6	800	NA	G	NR	NR			√	√	√
PEARLBOND™ 12F75UV	Polyester	78A	N	N	N	Y	Y	Y	400-700**	145	-30	Slow	30	4	525	NA	G	NR	G			√	√	√
PEARLSTICK™ 5714 F1	Polyether	80A	N	N	N	Y	Y	Y	950-1350**	142	-40	Moderate	39	4	575	75	VG	G	G			√		√
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™ 5707 F1	Polyester	93A	N	N	N	Y	Y	Y	600-1300**	152	-10	Moderate	30	7.6	320	120	VG	G	G			√		
PEARLSTICK™ 5715 F2	Polyester	95A	Y	Y	N	Y	Y	Y	20-40	88	+20	Slow	18	4	350	70	F	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	Polyester	95A	Y	Y	N	Y	Y	Y	40-90	92	+20	Slow	39	7	370	75	F	NR	NR	√	√			√
PEARLSTICK™ 5778 NT1	Polyester	63D	Y	Y	Y	Y	Y	Y	30-70	89	+30	Slow	28.5	17	229	NA	G	NR	NR	√	√			√

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

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



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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