

Product Selection Guide

# PEARLBOND™ TPU FOR REACTIVE HOT MELTS (HMPUR)



*Lubrizol*

Engineered Polymers

# TPU (THERMOPLASTIC POLYURETHANE) FOR REACTIVE HOT MELTS (HMPUR)

IDENTIFICATION		MELTING BEHAVIOR				MELT VISCOSITY at 130° C (ISO 1133)	
Grades	TPU Polyol type	Hardness (Shore A/D) (ASTM D2240)	Melt Flow Index (g/10min)		Köfler Melting Point (°C) (MQSA 70A method)	DSC Melting Peak (°C) (CRIST-20 method)	Pa.s
			170 °C 2.16 Kg	170 °C 21.6 Kg			
PEARLBOND™ 893	PCL*	91A	60-120		63-67	46	250 - 650
PEARLBOND™ 508	PCL	93A		40-90	73-77	59	3500 - 4280
PEARLBOND™ 580	Polyester	50D	10-30		65-71	55	870 - 3200
PEARLBOND™ 550	PCL Copolymer	54D	10-30		66-70	55	870 - 3200
PEARLBOND™ 500	PCL	51D	15-30		64-68	57	870 - 3200
PEARLBOND™ 501	PCL	51D	30-60		63-67	58	400 - 900
PEARLBOND™ 503	PCL	51D	60-100		60-64	55	250 - 400
PEARLBOND™ 522	PCL	54D		105-160	65-69	58	1800 - 4300
PEARLBOND™ 520	PCL	54D	15-30		64-68	58	870 - 2000
PEARLBOND™ 521	PCL	54D	30-60		63-67	58	400 - 900
PEARLBOND™ 523	PCL	54D	60-100		60-64	58	250 - 400
PEARLBOND™ 539	PCL	54D	150-200		58-60	55	120 - 180
PEARLBOND™ ECO 590	Polyester	52D	30-60		80-84	65	600 - 2000

\*PCL= Polycaprolactone Copolyester

CRYSTALLIZATION BEHAVIOR			OH VALUE	MOISTURE CONTENT	APPLICATION			
DSC Tg Temperature (°C)	DSC Tcr rate	Crystallization range (minutes) (MQSA 12A method)	mg/KOH/g (MQSA 47A method)	% (MQSA 44 method)	<ul style="list-style-type: none"> <li>• Specially suitable</li> <li>○ Suitable</li> </ul>			
					Footwear	Automotive	Furniture	Primers /others
-40	Slow	30 ± 5	<3	<0.15	•		•	•
-40	Slow	20 ± 3	<3	<0.15	•			•
-41	Fast	16 ± 2	<3	<0.15	•			•
-41	Fast	12 ± 2	<3	<0.15	•		•	
-40	Fast	16 ± 1	<3	<0.15	•		•	
-40	Fast	16 ± 1	<3	<0.15		○		•
-39	Fast	16 ± 1	<5	<0.15	○	•		•
-40	Very Fast	10 ± 1	<3	<0.15	•		•	•
-40	Very Fast	10 ± 1	<3	<0.15	•		•	•
-40	Very Fast	10 ± 1	<3	<0.15	•	•	○	•
-40	Very Fast	10 ± 1	<5	<0.15	•	•	○	•
-40	Very Fast	9 ± 1	<5	<0.15	•		•	•
-40	Extremely Fast	5 ± 1	<3	<0.15	•	•	•	•



## 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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