

### Typical Values - PPS Film

Properties	Test Method	Units ASTM	Values as Prepared(1)	Units ISO	Values as Prepared(2)
Specific Gravity	ASTM D792	-	<u>1.264</u>		
Tensile Strength at Yield @ 0.125" thick	ASTM D638	psi		MPa	
-40C			-		87.0
RT			-		46.4
60C			12620		41.4
120C			7820		12.6
			6000		
			1830		
Tensile Elongation at Break @ 0.125" thick	ASTM D638	%		%	
-40C					
RT			10		10
60C			25		25
120C			55		55
			95		95
Yield @ 0.125" thick					
-40C			6		6
RT			6		6
60C			6		6
120C			30		30
Flexural Strength@ 0.125" thick				MPa	
RT	ASTM D790	psi			79.3
120C			11,500		11.3
			1640		
Flexural Modulus@ 0.125" thick				MPa	
RT	ASTM D790	psi			2140
120C			310,000		280
			41,000		
Dielectric constant at 1 GHz	ASTM D150	-	3.3	-	3.3
Notched Izod	ASTM D256	ft. lb/in	9.5	KJ/m2	40
Properties	Test Method	Units ASTM	Values as Prepared(1)	Units ISO	Values as Prepared(2)
UnNotched Izod	ASTM D256	ft. lb/in	No Break	KJ/m2	40
Dynatub Instrumental impact, Total Energy	ASTM D376 3	ft. lb	45	Dyne-cm	4.1

HDT at 264 psi	ASTM D648	C	82	C	82
Viscosity at 1200 sec-1, 310C		Poise	2750	Poise	2750
Coefficient of linear thermal expansion		cm/cm degCx10-5			
Flow direction 0 - 85C			8.44		
Flow direction 85-200C			18.3		
Traverse direction 0 - 85C			8.32		
Traverse direction 85 - 200C			13.4		
Flow direction 85-200C			8.32		
Compressive strength at 1% strain RT 120C	ISO604	psi	3215 780	MPa	22 5.5
Compressive modulus RT 120C	ISO604	psi	328,000 52,215	MPa	2260 360
Compressive strength at 1% strain RT 120C	ISO604		p8.32		
Instrumental Impact total energy	ASTM	ft lbs a	44.7	MPa	2260 360
Static coefficient of friction - steel	ASTM		0.2		
Properties	Test Method	Units ASTM	Values as Prepared(1)	Units ISO	Values as Prepared(2)
Dynamic coefficient of friction - steel	ASTM		0.2		
Wear from abrasive wheels (CS-17)	ISO9352/				
0-1000cps	ASTM4060	mg/1K cycl	12-5		
0-10000cps	ASTM4060	mg/1K cycl	5.6		
Rockwell Hardness	ASTM		40.7		
Water Absorption	ASTMD570		0.027		

(1)Cold Mold about 90°C (2) Cold Mold about 90°C

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