

Softflex 3910

Thermoplastic Elastomer Alloy

LyondellBasell Industries

Engineering Plastics

General			
Uses	• Overmolding		
Agency Ratings	• EC 1907/2006 (REACH) • EU 2002/96/EC (WEEE)		
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity (Natural)	1.05	1.05 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹			ASTM D1238
200°C/5.0 Kg	2.6 g/10 min	2.6 g/10 min	
230°C/21.6 Kg	0.90 g/10 min	0.90 g/10 min	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Taber Abrasion Resistance			ASTM D3389
73°F (23°C), 1000 Cycles, 1000 G, H-22 Wheel	0.248 mg	0.248 mg	

Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Set (100% Strain)	14 %	14 %	ASTM D412
Tensile Stress			ASTM D412
50% Strain	1030 psi	7.08 MPa	
100% Strain	1170 psi	8.03 MPa	
300% Strain	1500 psi	10.3 MPa	
Tensile Strength ² (Yield)	1510 psi	10.4 MPa	ASTM D412
Tensile Elongation (Break)	330 %	330 %	ASTM D412
Tear Strength			ASTM D624
73°F (23°C), 0.125 In (3.18 Mm)	305 lbf/in	53.4 kN/m	
Compression Set			ASTM D395
73°F (23°C), 22 Hr ³	47 %	47 %	
158°F (70°C), 22 Hr	94 %	94 %	
212°F (100°C), 22 Hr	96 %	96 %	

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Gardner Impact			ASTM D5420
-22°F (-30°C), 0.125 In (3.18 Mm), Injection Molded	127 in·lb	14.3 J	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 Sec, 73°F (23°C), 0.125 In (3.18 Mm), Injection Molded	90	90	
Shore A, 10 Sec, 73°F (23°C), 0.125 In (3.18 Mm), Injection Molded	88	88	

Additional Information	Nominal Value (English)	Nominal Value (SI)
Overmold Bonding	ABS, PC, ABS/PC, PPO	ABS, PC, ABS/PC, PPO

Notes

¹ Procedure A² 20 in/min (510 mm/min)³ Method B