Technical Data Sheet

Softflex® 3910

Thermoplastic Elastomer Alloy
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/cm³	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	
Molding Shrinkage			ASTM D955
Flow : 73°F (23°C), 0.125 in (3.18 mm), Injection Molded	0.019 in/in	1.9 %	
Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Injection Molded	0.017 in/in	1.7 %	
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 A

[2] 20 in/min (510 mm/min)

[3] Method B