

Technical Data Sheet

Softflex 2701 1803 BLACK BLEND

Thermoplastic Elastomer

Product Description

Softflex 2701 1803 BLACK BLEND is a Thermoplastic Elastomer material.

Application Overmolding

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (235 °C/1.0 kg, Procedure A)	5.0	g/10 min	5.0	g/10 min	ASTM D1238
Density - Specific Gravity	0.992	g/cm ³	0.992	g/cm ³	ASTM D792
Mechanical					
Tensile Stress at 100%			1.99	MPa	ASTM D412
Tensile Stress at 300%			3.36	MPa	ASTM D412
Tensile Stress at 50%			1.5	MPa	ASTM D412
Tensile Set, (100%)	4	%	4	%	ASTM D412
Tensile Strength at Yield, (510 mm/min)			11.3	MPa	ASTM D412
Tensile Elongation at Break	870	%	870	%	ASTM D412
Tear Strength			52.2	kN/m	ASTM D624
Impact					
Gardner Impact, (-30 °C)			27.0	J	ASTM D5420
Hardness					
Durometer Hardness					
(Shore A)	48		48		ASTM D2240
(Shore A, 10 sec)	45 to 55		45 to 55		ASTM D2240
Additional Information					
Compression Set					
(100 °C, 22 hr, Method B)	89	%	89	%	ASTM D395
(23 °C, 22 hr, Method B)	22	%	22	%	ASTM D395
(70 °C, 22 hr, Method B)	73	%	73	%	ASTM D395
Peel Strength 90°	20.4	lbf/in			ASTM D429
Taber Abrasion Resistance, (H-22 Wheel, 1000 g, 1000 Cycles)			58.9	mg	ASTM D3389

Injection Parameters	Nominal Value	English Units	Nominal Value	SI Units
Drying Time	4.0 to 6.0	hr	4.0 to 6.0	hr
Drying Temperature			54 to 66	°C
Nozzle Temperature			199 to 216	°C
Screw Speed	20 to 40	rpm	20 to 40	rpm
Processing (Melt) Temp			193 to 210	°C
Front Temperature			210 to 221	°C
Holding Pressure			1.38 to 5.52	MPa
Middle Temperature			171 to 193	°C
Rear Temperature			160 to 182	°C
Back Pressure			0.517 to 1.03	MPa
Mold Temperature			27 to 49	°C
Injection Pressure			3.45 to 4.14	MPa