

Technical Data Sheet



Softflex 2701

Thermoplastic Elastomer
LyondellBasell Industries
Engineering Plastics

General			
Material Status	• Commercial: Active		
Availability	• North America		
Uses	• Overmolding		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	0.994	0.992 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹ (235°C/1.0 kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Taber Abrasion Resistance 1000 Cycles, 1000 g, H-22 Wheel	58.9 mg	58.9 mg	ASTM D3389
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Peel Strength - 90°	20 lbf/in	3.6 kN/m	ASTM D429
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Set (100% Strain)	4 %	4 %	ASTM D412
Tensile Stress			ASTM D412
50% Strain	218 psi	1.50 MPa	
100% Strain	289 psi	1.99 MPa	
300% Strain	487 psi	3.36 MPa	
Tensile Strength ² (Yield)	1640 psi	11.3 MPa	ASTM D412
Tensile Elongation (Break)	870 %	870 %	ASTM D412
Tear Strength	298 lbf/in	52.2 kN/m	ASTM D624
Compression Set			ASTM D395B
73°F (23°C), 22 hr	22 %	22 %	
158°F (70°C), 22 hr	73 %	73 %	
212°F (100°C), 22 hr	89 %	89 %	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Gardner Impact (-22°F (-30°C))	239 in-lb	27.0 J	ASTM D5420
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A	48	48	
Shore A, 10 sec	45 to 55	45 to 55	

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

Note:

- Vapor-honed or other matte surface mold cavities (including sprue) are recommended for best mold release characteristics.
- Sprue break may be utilized to aid in sprue and runner removal.
- Sprue length should be kept as short as possible to aid sprue release.
- Heated sprue should be incorporated whenever possible.
- Excess shear heating or barrel residence time can cause delamination at gates, sticking to the tool, or material degradation.

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Legal Statement

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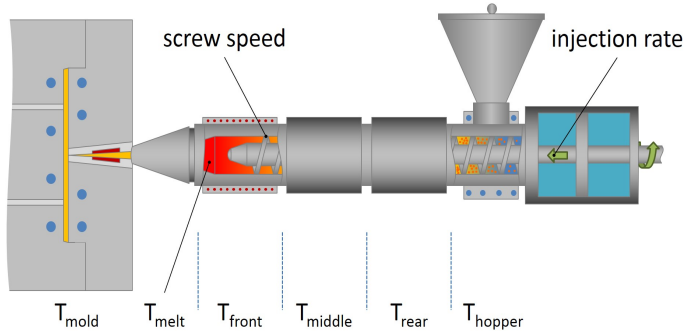
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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	130 to 150 °F	54 to 66 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Rear Temperature	320 to 360 °F	160 to 182 °C
Middle Temperature	340 to 380 °F	171 to 193 °C
Front Temperature	410 to 430 °F	210 to 221 °C
Nozzle Temperature	390 to 420 °F	199 to 216 °C
Processing (Melt) Temp	380 to 410 °F	193 to 210 °C
Mold Temperature	80 to 120 °F	27 to 49 °C
Injection Pressure	500 to 600 psi	3.45 to 4.14 MPa
Holding Pressure	200 to 800 psi	1.38 to 5.52 MPa
Back Pressure	75.0 to 150 psi	0.517 to 1.03 MPa
Screw Speed	20 to 40 rpm	20 to 40 rpm

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Notes

¹ Procedure A

² 20 in/min (510 mm/min)

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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