

Technical Data Sheet

**Softflex 6018**

Thermoplastic Elastomer
LyondellBasell Industries
Engineering Plastics

Product Description

Softflex 6500 is suitable for overmolding polypropylene and polyethylene.

General

Material Status	• Commercial: Active
Availability	• North America
Uses	• Overmolding
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity (Natural)	1.18	1.18 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	12 g/10 min	12 g/10 min	ASTM D1238
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹			ASTM D412
Yield, 73°F (23°C), 0.125 in (3.18 mm)	700 psi	4.83 MPa	
Tear Strength	130 lbf/in	22.8 kN/m	ASTM D624
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Shore Hardness			ASTM D2240
Shore A, 73°F (23°C), 0.125 in (3.18 mm), Injection Molded	60	60	
Aging	Nominal Value (English)	Nominal Value (SI)	Test Method
Change in Ultimate Elongation	900 %	900 %	ASTM D412

Additional Information

Overmold Bonding To: PP, PE

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Injection	Nominal Value (English)	Nominal Value (SI)
Rear Temperature	340 to 360 °F	171 to 182 °C
Middle Temperature	370 to 390 °F	188 to 199 °C
Front Temperature	400 to 420 °F	204 to 216 °C
Nozzle Temperature	395 to 415 °F	202 to 213 °C
Mold Temperature	70 to 110 °F	21 to 43 °C
Injection Rate	Moderate-Fast	Moderate-Fast
Back Pressure	90.0 to 175 psi	0.621 to 1.21 MPa
Screw L/D Ratio	20.0:1.0	20.0:1.0
Screw Compression Ratio	1.5:1.0	1.5:1.0

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Notes

¹ 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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