

Technical Data Sheet



Network Polymers Sbs 1000

Styrene Butadiene Block Copolymer
LyondellBasell Industries
Engineering Plastics

General

Material Status	• Commercial: Active
Availability	• North America
Features	• Food Contact Acceptable
Appearance	• Clear/Transparent
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.03	1.03 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹ (200°C/5.0 kg)	11 g/10 min	11 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Break)	3300 psi	22.8 MPa	ASTM D638
Flexural Modulus ³	250000 psi	1720 MPa	ASTM D790B
Flexural Strength ³	5400 psi	37.2 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.125 in (3.18 mm))	0.50 ft·lb/in	27 J/m	ASTM D256A
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	60 to 70	60 to 70	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	170 °F	76.7 °C	ASTM D648
Vicat Softening Temperature	195 °F	90.6 °C	ASTM D1525 ⁴
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Haze	< 4.00 %	< 4.00 %	ASTM D1003
Color, Yellowness Index ⁵	< 8.40	< 8.40	

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Injection	Nominal Value (English)	Nominal Value (SI)
Suggested Shot Size	40 to 80 %	40 to 80 %
Rear Temperature	340 °F	171 °C
Middle Temperature	360 °F	182 °C
Front Temperature	375 °F	191 °C
Nozzle Temperature	400 °F	204 °C
Processing (Melt) Temp	< 450 °F	< 232 °C
Mold Temperature	80 °F	27 °C
Injection Pressure	1100 psi	7.58 MPa
Back Pressure	90.0 psi	0.621 MPa
Screw Speed	200 rpm	200 rpm

Injection Notes

Injection Speed: 0.5 in/sec

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Notes

¹ Procedure A

² 2.0 in/min (51 mm/min)

³ Method I (3 point load), 0.050 in/min (1.3 mm/min)

⁴ Loading 1 (10 N)

⁵ BAM 1015

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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