

Technical Data Sheet



Network Polymers Smma MS 170

Styrene Methyl Methacrylate Acrylic Copolymer

LyondellBasell Industries

Engineering Plastics

General			
Material Status	• Commercial: Active		
Availability	• North America		
Features	• Terpolymer		
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			ASTM D1238
200°C/5.0 kg	9.6 g/10 min	9.6 g/10 min	
230°C/3.8 kg	27 g/10 min	27 g/10 min	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ²	4150 psi	28.6 MPa	ASTM D638
Tensile Elongation ² (Break)	54 %	54 %	ASTM D638
Flexural Modulus ³	270000 psi	1860 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)	72	72	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	181 °F	82.8 °C	
264 psi (1.8 MPa), Unannealed	153 °F	67.2 °C	
Vicat Softening Temperature	205 °F	96.1 °C	ASTM D1525
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Light Transmittance	89.0 %	89.0 %	ASTM D1003

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)

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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