

Technical Data Sheet



Network Polymers Smma MS 221

Styrene Methyl Methacrylate Acrylic Copolymer
LyondellBasell Industries
Engineering Plastics

General			
Material Status	• Commercial: Active		
Availability	• North America		
Features	• Copolymer		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.08	1.08 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹ (200°C/5.0 kg)	1.9 g/10 min	1.9 g/10 min	ASTM D1238
Water Absorption (24 hr)	0.10 %	0.10 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Yield)	8400 psi	57.9 MPa	ASTM D638
Tensile Elongation ² (Yield)	2.1 %	2.1 %	ASTM D638
Flexural Modulus	450000 psi	3100 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.125 in (3.18 mm))	0.40 ft-lb/in	21 J/m	ASTM D256
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (M-Scale)	70	70	ASTM D785
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	222 °F	106 °C	ASTM D1525 ³
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Light Transmittance	91.3 %	91.3 %	ASTM D1003

Notes

¹ Procedure A

² 2.0 in/min (51 mm/min)

³ Rate B (120°C/h), Loading 1 (10 N)

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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