

Technical Data Sheet

# Network Polymers Smma MS 150

Styrene Methyl Methacrylate Acrylic Copolymer  
 LyondellBasell Industries  
 Engineering Plastics

**General**

Features	• Terpolymer	
Agency Ratings	• FDA 21 CFR 177.1640	• FDA 21 CFR 177.1830

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.05	1.05 g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) <sup>1</sup> (200°C/5.0 Kg)	4.1 g/10 min	4.1 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 Modulus	320000 psi	2210 MPa	ASTM D638
Tensile Strength <sup>2</sup>	4990 psi	34.4 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	31 %	31 %	ASTM D638
Flexural Modulus <sup>3</sup>	266000 psi	1830 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)	75	75	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 Psi (0.45 Mpa), Unannealed	181 °F	82.8 °C	ASTM D648
Vicat Softening Temperature	207 °F	97.2 °C	ASTM D1525
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Light Transmittance	89.0 %	89.0 %	ASTM D1003

- Notes**
- <sup>1</sup> Procedure A
  - <sup>2</sup> 2.0 in/min (51 mm/min)
  - <sup>3</sup> 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.