

Technical Data Sheet

Network Polymers Smma MS 100

Styrene Methyl Methacrylate Acrylic Copolymer
 LyondellBasell Industries
 Engineering Plastics

General

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.08	1.08 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹ (200°C/5.0 Kg)	0.40 g/10 min	0.40 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 ²	501000 psi	3450 MPa	ASTM D638
Tensile Strength ² (Break)	9500 psi	65.5 MPa	ASTM D638
Tensile Elongation ² (Break)	2.3 %	2.3 %	ASTM D638
Flexural Modulus ³	458000 psi	3160 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.125 In (3.18 Mm))	0.46 ft·lb/in	25 J/m	ASTM D256A
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 Psi (0.45 Mpa), Unannealed	199 °F	92.8 °C	ASTM D648
Vicat Softening Temperature	215 °F	102 °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.