

Technical Data Sheet

Network Polymers Smma MS 170

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	1.03	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.