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/cm³	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.