

Technical Data Sheet

Network Polymers Smma MS 221

Styrene Methyl Methacrylate Acrylic Copolymer

LyondellBasell Industries

Engineering Plastics

General

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.