

Technical Data Sheet

Polyman (ABS) M/MI

Acrylonitrile Butadiene Styrene
LyondellBasell Industries
Engineering Plastics

Product Description

medium impact standard ABS-grade

General

Features	• Medium Impact Resistance
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm ³	1.05 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 Kg)	23 cm ³ /10min	23 cm ³ /10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	334000 psi	2300 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	7250 psi	50.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	2.3 %	2.3 %	ISO 527-2/1A/50
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.8 ft·lb/in ²	8.0 kJ/m ²	
73°F (23°C)	8.6 ft·lb/in ²	18 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	36 ft·lb/in ²	75 kJ/m ²	
73°F (23°C)	No Break	No Break	
Notched Izod Impact (Area) (73°F (23°C))	7.61 ft·lb/in ²	16.0 kJ/m ²	ASTM D256
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	15700 psi	108 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	205 °F	96.0 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	198 °F	92.0 °C	ISO 75-2/Af
Vicat Softening Temperature	207 °F	97.0 °C	ISO 306/B50
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 60093
Volume Resistivity	> 1.0E+13 ohms·m	> 1.0E+13 ohms·m	IEC 62631-3-1
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 In (1.5 Mm)	HB	HB	

Additional Information

- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications

Notes

These are typical property values not to be construed as specification limits.