

Technical Data Sheet

POLYMAN[®] (ABS) M/MI CA

Acrylonitrile Butadiene Styrene
Engineering Plastics

Product Description

Medium impact standard ABS-grade with constant anti-static properties.

General

Processing Method	• Injection Molding
Resin ID (ISO 1043)	• ABS

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.07 g/cm ³	1.07 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	31 cm ³ /10min	31 cm ³ /10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	319000 psi	2200 MPa	ISO 527-2/1A/1
Tensile Stress			
Yield	6340 psi	43.7 MPa	ISO 527-2/1A/50
Break	4610 psi	31.8 MPa	ISO 527-2/1/50
Tensile Strain (Yield)	2.7 %	2.7 %	ISO 527-2/1A/50
Nominal Tensile Strain at Break	12 %	12 %	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)	7.5 ft·lb/in ²	16 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
73°F (23°C)	39 ft·lb/in ²	83 kJ/m ²	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	13900 psi	95.7 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/Af
264 psi (1.8 MPa), Unannealed	217 °F	103 °C	
Vicat Softening Temperature	203 °F	95.0 °C	ISO 306/B50
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	< 5.0E+11 ohms	< 5.0E+11 ohms	IEC 60093
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm)	2.8 in/min	72 mm/min	ISO 3795
0.0787 in (2.00 mm)	2.8 in/min	72 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 in (1.5 mm)	HB	HB	
Glow Wire Flammability Index			IEC 60695-2-12
0.06 in (1.5 mm)	1250 °F	675 °C	
0.12 in (3.0 mm)	1200 °F	650 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 in (1.5 mm)	1290 °F	700 °C	
0.12 in (3.0 mm)	1250 °F	675 °C	

Additional Information

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