Technical Data Sheet

POLYMAN® (ABS) M/HI

Acrylonitrile Butadiene Styrene
Engineering Plastics

Product Description
High impact ABS standard grade

General		
Features	• Antistatic	• Impact Modified
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• ABS	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm³	1.05 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	17 cm³/10min	17 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	334000 psi	2300 MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	6960 psi	48.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	2.1 %	2.1 %	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)	4.3 ft·lb/in²	9.0 kJ/m²	
73°F (23°C)	10 ft·lb/in²	21 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	34 ft·lb/in²	71 kJ/m²	
73°F (23°C)	No Break	No Break	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 358/30)	16000 psi	110 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	203 °F	95.0 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	196 °F	91.0 °C	ISO 75-2/Af
Vicat Softening Temperature	199 °F	93.0 °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
Comparative Tracking Index	600 V	600 V	IEC 60112
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	
Glow Wire Flammability Index			IEC 60695-2-12
0.06 in (1.5 mm)	1020 °F	550 °C	
0.12 in (3.0 mm)	1020 °F	550 °C	

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