Technical Data Sheet

POLYMAN® (ASA) M/MI 2010

Acrylonitrile Styrene Acrylate
Engineering Plastics

Product Description
medium impact ASA grade with good weatherability for injection molding

General	
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• ASA

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)	16 cm³/10min	16 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	290000 psi	2000 MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	6240 psi	43.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	3.2 %	3.2 %	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)	1.9 ft·lb/in²	4.0 kJ/m²	
73°F (23°C)	5.2 ft·lb/in²	11 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	33 ft·lb/in²	69 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)	12600 psi	87.0 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	183 °F	84.0 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	162 °F	72.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	217 °F	103 °C	ISO 306/A50
--	196 °F	91.0 °C	ISO 306/B50
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	
0.12 in (3.0 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)	1250 °F	675 °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)	1290 °F	700 °C	

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