Technical Data Sheet

POLYMAN® ABS 1012

Acrylonitrile Butadiene Styrene
Engineering Plastics

Product Description
ABS industrial quality. The product can contain up to 5% mineral substances.

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.06 g/cm³	1.06 g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	27 cm³/10min	27 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	363000 psi	2500 MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	6090 psi	42.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	2.5 %	2.5 %	ISO 527-2/1A/50
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength (73°F (23°C))	4.8 ft·lb/in²	10 kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength	17 ft·lb/in²	36 kJ/m²	ISO 179/1eU
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 358/30)	15400 psi	106 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	185 °F	85.0 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	165 °F	74.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	214 °F	101 °C	ISO 306/A50
--	203 °F	95.0 °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

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.