Technical Data Sheet

Polyman ABS M/MI A K1452 NAT

Acrylonitrile Butadiene Styrene

Product Description
Medium impact standard ABS grade, antistatic

Processing Method	Injection Molding
Attribute	Medium Impact Resistance
Additive	Antistatic
Resin ID	ABS

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	25	cm³/10 min	ISO 1133
Density, (Method A)	1.06	g/cm³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	50.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	3.0	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2600	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	15	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	91	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	58	kJ/m²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	120	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	97.0	°C	ISO 306
(A (10N), 50 °C/h)	103	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	88.0	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	77.0	°C	ISO 75-2/A
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302

Glow Wire Flammability Index			
(1.5 mm)	675	°C	IEC 60695-2-12
(3.0 mm)	675	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	700	°C	IEC 60695-2-13
(3.0 mm)	700	°C	IEC 60695-2-13
UL Information			
Flammability Classification			
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20
UL File Number	E86615		