

## Technical Data Sheet

**Polyman ABS M/MI A K1452 RED51742**

Acrylonitrile Butadiene Styrene

**Product Description**

Medium impact standard ABS grade, antistatic

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Medium Impact Resistance
<b>Additive</b>	Antistatic
<b>Resin ID</b>	ABS

<b>Typical Properties</b>	<b>Nominal Value</b>	<b>Units</b>	<b>Test Method</b>
<b>Physical</b>			
Melt Volume Flow Rate, (220 °C/10.0 kg)	25	cm <sup>3</sup> /10 min	ISO 1133
Density, (Method A)	1.06	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical</b>			
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
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	15	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m <sup>2</sup>	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	91	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise)	58	kJ/m <sup>2</sup>	ISO 179
<b>Hardness</b>			
Ball Indentation Hardness, (H 358/30)	120	MPa	ISO 2039-1
<b>Thermal</b>			
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
<b>Flammable</b>			
Burning Rate			
(2.00 mm)	<100	mm/min	FMVSS 302
(2.00 mm)	<100	mm/min	ISO 3795

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
<b>UL Information</b>		
Flammability Classification		
(1.5 mm)	HB	IEC 60695-11-10, -20
(3.0 mm)	HB	IEC 60695-11-10, -20
UL File Number	E86615	