

Technical Data Sheet

Polyman ABS M/MI CA BLK 74454



Acrylonitrile Butadiene Styrene

Product Description

Medium impact standard ABS-grade with constant anti-static properties.

Processing Method Injection Molding

Resin ID ABS

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	31	cm ³ /10 min	ISO 1133
Density, (Method A)	1.07	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	43.7	MPa	ISO 527-2
Nominal Tensile Strain at Break, (50 mm/min, Type 1A)	12	%	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	2.7	%	ISO 527-2
Tensile Stress at Break, (Type 1, 50 mm/min)	31.8	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2200	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	16	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)	83	kJ/m ²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	95.7	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (B (50N), 50 °C/h)	95.0	°C	ISO 306
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	103	°C	ISO 75-2/A
Electrical			
Surface Resistivity	<5.0E+11	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	72	mm/min	FMVSS 302
(2.00 mm)	72	mm/min	ISO 3795
Glow Wire Flammability Index			
(1.5 mm)	675	°C	IEC 60695-2-12
(3.0 mm)	650	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	700	°C	IEC 60695-2-13
(3.0 mm)	675	°C	IEC 60695-2-13
UL Information			
Flammability Classification, (1.5 mm)	HB		IEC 60695-11-10, -20