Technical Data Sheet

Polyman ABS M/MI GL K1455 GRY65620

Acrylonitrile Butadiene Styrene

Product Description
medium impact standard ABS-grade

Processing Method	Injection Molding
Attribute	Medium Impact Resistance

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	23	cm³/10 min	ISO 1133
Density, (Method A)	1.05	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)	2.3	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2300	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	18	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	75	kJ/m²	ISO 179
Notched Izod Impact (Area), (23 °C)	16.0	kJ/m²	ASTM D256
Hardness			
Ball Indentation Hardness, (H 358/30)	108	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (B (50N), 50 °C/h)	97.0	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	96.0	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	92.0	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	FMVSS 302
(2.00 mm)	<100	mm/min	ISO 3795

UL Information			
Flammability Classification, (1.5 mm)	HB		IEC 60695-11-10, -20