Technical Data Sheet

Polyman ABS M/TK A K1459 BLK70400

Acrylonitrile Butadiene Styrene

Product Description

ABS standard grade with higher softening temperature, antistatic, suitable for food contact applications

Processing Method	Injection Molding
Resin ID	ABS

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	29	cm³/10 min	ISO 1133
Density, (Method A)	1.05	g/cm³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	52.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	2.5	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2500	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)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	80	kJ/m²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	105	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (B (50N), 50 °C/h)	98.0	°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+12	ohm*m	IEC 62631-3-1
Surface Resistivity	>1.0E+13	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
(3.0 mm)	HB		IEC 60695-11-10, -20