

Technical Data Sheet

Polyman ABS HH I BLK 70400

Acrylonitrile Butadiene Styrene

Product Description

Heat resistant ABS grade

Processing Method Injection Molding**Resin ID** ABS

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	4.0	cm ³ /10 min	ISO 1133
Density, (Method A)	1.05	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	49.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	2.7	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	1900	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	12	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)	65	kJ/m ²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	94.0	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (B (50N), 50 °C/h)	107	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	107	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	103	°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)	43	mm/min	FMVSS 302
(2.00 mm)	43	mm/min	ISO 3795
Glow Wire Flammability Index			
(1.5 mm)	650	°C	IEC 60695-2-12
(3.0 mm)	650	°C	IEC 60695-2-12

UL Information

Flammability Classification

(1.5 mm)	HB	IEC 60695-11-10, -20
(3.0 mm)	HB	IEC 60695-11-10, -20

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	80	°C
Processing (Melt) Temp	230 to 260	°C
Mold Temperature	40 to 80	°C