Technical Data Sheet

Polyman FABS 20 GF NAT

Acrylonitrile Butadiene Styrene

Product Description

20% glass fibre reinforced ABS grade

Processing Method	Injection Molding
Filler/Reinforcement	Glass Fiber, 20%
Resin ID	ABS-GF

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	11	cm³/10 min	ISO 1133
Density, (Method A)	1.20	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	2.0	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 5 mm/min)	75.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	6500	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	6.0	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	4.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)	17	kJ/m²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	92.0	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (B (50N), 50 °C/h)	102	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	105	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	101	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	600	V	IEC 60112
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