Technical Data Sheet

Ronfalin ABS 1412 GF17 A WHI89195

Acrylonitrile Butadiene Styrene

Product Description

17% glass fiber reinforced ABS compound. (Former name: POLYMAN FABS 17GF)

Processing Method	Injection Molding
Filler/Reinforcement	Glass Fiber, 17%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	12	cm³/10 min	ISO 1133
Density, (Method A)	1.16	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break, (5 mm/min)	1.9	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	5900	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	73.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	5400	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 2.2%)	112	MPa	ISO 178
(2.3 mm/min, 2.3%)	100	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	6.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	22	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	22	kJ/m²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	137	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	102	°C	ISO 306
(A (10N), 50 °C/h)	107	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	102	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	95.0	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI), (Solution A)	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
Glow Wire Ignition Temperature			
(1.5 mm)	700	°C	IEC 60695-2-13
(3.0 mm)	700	°C	IEC 60695-2-13
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