Technical Data Sheet

RW *Schulamid* 612 GF33 H2 BLACK

Polyamide 612

Product Description

33% glass fiber reinforced, Polyamide 612 Compound, with electrical neutralheat stabilization and high strength afterconditioning

Processing Method	Injection Molding
Attribute	Good Chemical Resistance; Good Heat Aging Resistance; Halogen Free
Filler/Reinforcement	Glass Fiber, 33%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (245 °C/5.0 kg)	32	cm³/10 min	ISO 1133
Density, (Method A)	1.32	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.2	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	4.4	%	ISO 527-2
Flexural Modulus, (23 °C, 2.0 mm/min)	9000	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	175	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	135	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	10000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	8000	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 3.5%)	250	MPa	ISO 178
(2.0 mm/min, 3.7%)	250	MPa	ISO 178
(23 °C, 2.0 mm/min, 3.7%)	255	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	15	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	15	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	90	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	85	kJ/m²	ISO 179
Thermal			

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	214	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	195	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
- Conditioned	>1.0E+10	ohm*m	IEC 62631-3-1
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	>1.0E+12	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	FMVSS 302
(2.00 mm)	<100	mm/min	ISO 3795
Additional Information			
Water Absorption 23C/50RH	0.9	%	ISO 62
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	3.0 to 4.0	hr
Drying Temperature	80	°C
Suggested Max Moisture	0.040 to 0.10	%
Processing (Melt) Temp	240 to 280	°C
Mold Temperature	50 to 90	°C