

Technical Data Sheet

Schulamid 66 GF30 HE LW BLK968069



Polyamide 66

Product Description

30% glass fiber reinforced and heat stabilized polyamide 66-compound, electrical neutral, transparent for laser light of laser welding processes

Processing Method Injection Molding

Filler/Reinforcement Glass Fiber, 30%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.37	g/cm ³	ISO 1183
Viscosity Number	160	cm ³ /g	ISO 307
Mechanical			
Flexural Strain at Flexural Strength	4.5	%	ISO 178
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.5	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	8.0	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	8200	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	180	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	96.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	9800	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	5800	MPa	ISO 527-1
Flexural Stress, (2.0 mm/min)	270	MPa	ISO 178
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)	9.0	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	15	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	85	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	70	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	78	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	>250	°C	ISO 306
(A (10N), 50 °C/h)	>250	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	>250 °C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	240 °C	ISO 75-2/A

Flammable

Burning Rate		
(2.00 mm)	30 mm/min	FMVSS 302
(2.00 mm)	30 mm/min	ISO 3795
Glow Wire Flammability Index		
(1.5 mm)	650 °C	IEC 60695-2-12
(3.0 mm)	675 °C	IEC 60695-2-12
Glow Wire Ignition Temperature		
(1.5 mm)	675 °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		3.0 to 4.0	hr
Drying Temperature		80	°C
Suggested Max Moisture		0.040 to 0.10	%
Processing (Melt) Temp		280 to 300	°C
Mold Temperature		60 to 120	°C