Technical Data Sheet

Schulamid 66 GF35 H NAT

Polyamide 66

Product Description

Schulamid 66 GF35 H NAT is a Polyamide 66 Glass Fiber, 35% filled material and is typically used in Injection Molding applications. Features include: Heat Aging Resistant, High Stiffness, Medium Viscosity, and Oil Resistant.

Processing Method	Injection Molding
Attribute	Good Heat Aging Resistance; High Stiffness; Medium Viscosity; Oil Resistant
Appearance	Colors Available
Filler/Reinforcement	Glass Fiber, 35%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.40	g/cm³	ISO 1183
Viscosity Number	145	cm³/g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	6.0	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	190	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	125	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	11000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	7200	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	14	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	10	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	20	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	85	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	50	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	95	kJ/m²	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)	246	°C	ISO 75-2/A
Melting Temperature	260	°C	ISO 11357-3
RTI Elec			
(1.5 mm)	120	°C	UL 746B
(3.0 mm)	120	°C	UL 746B
(0.75 mm)	120	°C	UL 746B
RTI Imp			
(1.5 mm)	105	°C	UL 746B
(3.0 mm)	115	°C	UL 746B
(0.75 mm)	100	°C	UL 746B
RTI Str			
(1.5 mm)	120	°C	UL 746B
(3.0 mm)	130	°C	UL 746B
(0.75 mm)	110	°C	UL 746B
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)	30	mm/min	ISO 3795
(2.00 mm)	30	mm/min	FMVSS 302
Glow Wire Flammability Index			
(1.5 mm)	600	°C	IEC 60695-2-12
(3.0 mm)	600	°C	IEC 60695-2-12
Additional Information			
Water Absorption 23C/50RH	1.5	%	ISO 62
UL Information			
Flammability Classification			
(0.75 mm)	HB		IEC 60695-11-10, -20
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20
UL File Number	E86615		

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