

Technical Data Sheet

Schulamid 66 GF30 H NAT



Polyamide 66

Product Description

30% glass fiber reinforced, heat stabilized Polyamide 66

Processing Method Injection Molding

Attribute Good Heat Aging Resistance; Good Stiffness/Impact Balance; Medium Viscosity; Oil Resistant

Filler/Reinforcement Glass Fiber, 30%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.36	g/cm ³	ISO 1183
Viscosity Number	145	cm ³ /g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	7.0	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	175	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	110	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	10000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	6200	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	10	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	18	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	80	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	60	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	95	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)	245 °C	ISO 75-2/A
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
Comparative Tracking Index (CTI)	450 V	IEC 60112
Surface Resistivity	>1.0E+15 ohm	IEC 60093
- Conditioned	>1.0E+12 ohm	IEC 60093

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)	650 °C	IEC 60695-2-12

Additional Information

Water Absorption 23C/50RH	1.7 %	ISO 62
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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