SCHULAMID® 66 GF 15 H

Polyamide 66
Engineering Plastics

Product Description
15% glass fiber reinforced, heat stabilized Polyamide 66

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight		
Features	• Good Surface Finish • Heat Aging Resistant	• Medium Viscosity • Oil Resistant	
UL File Number	• E86615		
Processing Method	• Injection Molding		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.23	--	g/cm³	ISO 1183/A
Molding Shrinkage				ISO 294-4
Across Flow	1.5	--	%	
Flow	0.40	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F (23°C), 50% RH	2.2	--	%	
Viscosity Number	140	--	cm³/g	ISO 307

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	899000 (6200)	522000 (3600)	psi (MPa)	ISO 527-2/1A/1
Tensile Stress (Break)	17400 (120)	10900 (75.0)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	12	%	ISO 527-2/1A/5
Flexural Modulus	711000 (4900)	--	psi (MPa)	ISO 178
Flexural Stress	23900 (165)	--	psi (MPa)	ISO 178
Flexural Strain at Flexural Strength	4.0	--	%	ISO 178

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	2.4 (5.0)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	2.9 (6.0)	4.3 (9.0)	ft·lb/in² (kJ/m²)	

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Impact	Dry	Conditioned	Unit	Test Method
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	13 (28)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	14 (30)	33 (70)	ft·lb/in² (kJ/m²)	
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Ball Indentation Hardness (H 358/30)	24700 (170)	16000 (110)	psi (MPa)	ISO 2039-1
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
66 psi (0.45 MPa), Unannealed	> 482 (> 250)	--	°F (°C)	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	455 (235)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	> 482 (> 250)	--	°F (°C)	ISO 306/A50
--	473 (245)	--	°F (°C)	ISO 306/B50
Ball Pressure Test (230°F (110°C))	Pass	--		IEC 60695-10-2
RTI Elec				UL 746
0.030 in (0.75 mm)	248 (120)	--	°F (°C)	
0.06 in (1.5 mm)	248 (120)	--	°F (°C)	
0.12 in (3.0 mm)	248 (120)	--	°F (°C)	
RTI Imp				UL 746
0.030 in (0.75 mm)	212 (100)	--	°F (°C)	
0.06 in (1.5 mm)	230 (110)	--	°F (°C)	
0.12 in (3.0 mm)	248 (120)	--	°F (°C)	
RTI Str				UL 746
0.030 in (0.75 mm)	230 (110)	--	°F (°C)	
0.06 in (1.5 mm)	248 (120)	--	°F (°C)	
0.12 in (3.0 mm)	266 (130)	--	°F (°C)	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	> 1.0E+15	> 1.0E+12	ohms	IEC 60093

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Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity	> 1.0E+13	> 1.0E+10	ohms·cm	IEC 60093
Comparative Tracking Index	450	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Burning Rate				
0.0787 in (2.00 mm)	< 3.9 (< 100)	--	in/min (mm/min)	ISO 3795
0.0787 in (2.00 mm)	< 3.9 (< 100)	--	in/min (mm/min)	FMVSS 302
Flammability Classification				IEC 60695-11-10, -20
0.030 in (0.75 mm)	HB	--		
0.06 in (1.5 mm)	HB	--		
0.12 in (3.0 mm)	HB	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.06 in (1.5 mm)	1200 (650)	--	°F (°C)	
0.12 in (3.0 mm)	1200 (650)	--	°F (°C)	

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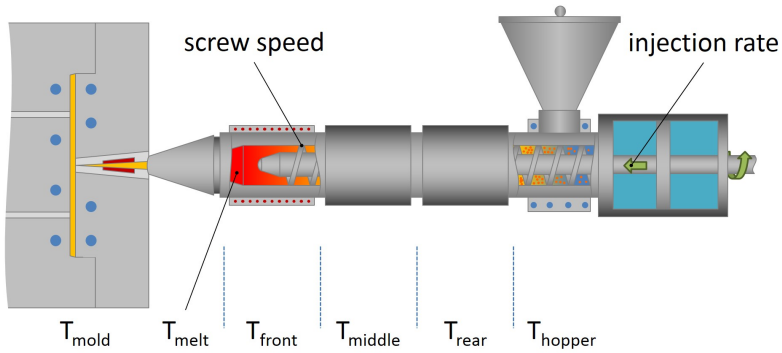

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Suggested Max Regrind	20 %	20 %
Processing (Melt) Temp	536 to 572 °F	280 to 300 °C
Mold Temperature	140 to 248 °F	60 to 120 °C