

Technical Data Sheet

SCHULAMID® 66 MW 30 FR 4

Polyamide 66
Engineering Plastics

Product Description
30% mineral filled flame retardant Polyamide 66 grade; without PBDE; low warpage

General	
Filler / Reinforcement	• Mineral, 30% Filler by Weight
Features	• Flame Retardant • Low Warpage
UL File Number	• E86615
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66 MF30 FR(17)

Physical	Dry	Conditioned	Unit	Test Method
Density	1.60	--	g/cm ³	ISO 1183/A
Molding Shrinkage	0.60 to 0.90	--	%	ISO 294-4

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.45E+6 (10000)	667000 (4600)	psi (MPa)	ISO 527-2/1A/1
Tensile Stress (Break)	14500 (100)	7980 (55.0)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	2.8	9.0	%	ISO 527-2/1A/5

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	1.3 (2.8)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	1.4 (3.0)	1.7 (3.5)	ft·lb/in ² (kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	17 (35)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	17 (35)	28 (58)	ft·lb/in ² (kJ/m ²)	

Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
66 psi (0.45 MPa), Unannealed	473 (245)	--	°F (°C)	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	396 (202)	--	°F (°C)	ISO 75-2/Af

Electrical	Dry	Conditioned	Unit	Test Method
Comparative Tracking Index	300	--	V	IEC 60112

Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate	< 3.9 (< 100)	--	in/min (mm/min)	ISO 3795
Flammability Classification				IEC 60695-11-10, -20
0.06 in (1.5 mm)	V-0	--		
0.030 in (0.75 mm)	V-2	--		

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Flammability	Dry	Conditioned	Unit	Test Method
Glow Wire Flammability Index				IEC 60695-2-12
0.030 in (0.75 mm)	1760 (960)	--	°F (°C)	
0.06 in (1.5 mm)	1760 (960)	--	°F (°C)	
0.12 in (3.0 mm)	1760 (960)	--	°F (°C)	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.030 in (0.75 mm)	1380 (750)	--	°F (°C)	
0.06 in (1.5 mm)	1380 (750)	--	°F (°C)	
0.12 in (3.0 mm)	1380 (750)	--	°F (°C)	
Oxygen Index	33	--	%	ISO 4589-2

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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	25 %	25 %
Processing (Melt) Temp	518 to 554 °F	270 to 290 °C
Mold Temperature	140 to 212 °F	60 to 100 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Back Pressure	290 to 1160 psi	2.00 to 8.00 MPa
Screw Speed	< 591 in/min	< 15 m/min

Injection Notes

Mould surface contacting melt should be of non-corrosive steel (content of chrome > 12%)

Notes

These are typical property values not to be construed as specification limits.