

Technical Data Sheet

SCHULAMID® 66 GF 30 FR 2

Polyamide 66
Engineering Plastics

Product Description

30% glass fiber reinforced flame-retardant Polyamide 66 grade; halogen free

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Features	• Flame Retardant • Halogen Free
UL File Number	• E86615
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66 GF30 FR(40)

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.43 g/cm ³	1.43 g/cm ³	ISO 1183/A
Viscosity Number	145 cm ³ /g	145 cm ³ /g	ISO 307

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	1.60E+6 psi	11000 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	22500 psi	155 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	2.5 %	2.5 %	ISO 527-2/1A/5

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	4.3 ft·lb/in ²	9.0 kJ/m ²	
73°F (23°C)	4.3 ft·lb/in ²	9.0 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	26 ft·lb/in ²	55 kJ/m ²	
73°F (23°C)	31 ft·lb/in ²	65 kJ/m ²	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	493 °F	256 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	468 °F	242 °C	ISO 75-2/ Af
Vicat Softening Temperature			
--	491 °F	255 °C	ISO 306/A50
--	444 °F	229 °C	ISO 306/B50
Ball Pressure Test (392°F (200°C))	Pass	Pass	IEC 60695-10-2

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Comparative Tracking Index	500 V	500 V	IEC 60112

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			ISO 3795
0.0295 in (0.750 mm), Self-Extinguishing	0.0 in/min	0.0 mm/min	
0.0591 in (1.50 mm), Self-Extinguishing	0.0 in/min	0.0 mm/min	
0.118 in (3.00 mm), Self-Extinguishing	0.0 in/min	0.0 mm/min	
Flammability Classification			IEC 60695-11-10, -20
0.030 in (0.75 mm)	V-0	V-0	
0.06 in (1.5 mm)	V-0	V-0	
0.12 in (3.0 mm)	V-0	V-0	
Glow Wire Flammability Index			IEC 60695-2-12
0.030 in (0.75 mm)	1760 °F	960 °C	
0.06 in (1.5 mm)	1760 °F	960 °C	
0.12 in (3.0 mm)	1760 °F	960 °C	



Technical Data Sheet

SCHULAMID[®] 66 GF 30 FR 2

Polyamide 66
Engineering Plastics

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Glow Wire Ignition Temperature			IEC 60695-2-13
0.030 in (0.75 mm)	1380 °F	750 °C	
0.06 in (1.5 mm)	1380 °F	750 °C	
0.12 in (3.0 mm)	1380 °F	750 °C	
Oxygen Index	34 %	34 %	ISO 4589-2

Technical Data Sheet

SCHULAMID® 66 GF 30 FR 2

Polyamide 66
Engineering Plastics



Injection	Nominal Value (English)	Nominal Value (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 572 °F	270 to 300 °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

Notes

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