Technical Data Sheet

SCHULAMID® 6 GF 30 FR2 A LM WEISS 96.0342 LM

Polyamide 6
Engineering Plastics

Product Description
30% glass fibre reinforced flame-retardant Polyamide 6 grade; halogen free

General		
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight	
Features	• Flame Retardant	• Halogen Free
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• PA6 GF30 FR(40)	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.61 g/cm³	1.61 g/cm³	ISO 1183/A
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	1.84E+6 psi	12700 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	18900 psi	130 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	1.5 %	1.5 %	ISO 527-2/1A/5
Flexural Modulus	1.73E+6 psi	11900 MPa	ISO 178
Flexural Stress [1] (2.0% Strain)	29000 psi	200 MPa	ISO 178
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	1.9 ft·lb/in²	4.0 kJ/m²	
73°F (23°C)	2.4 ft·lb/in²	5.0 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	12 ft·lb/in²	25 kJ/m²	
73°F (23°C)	14 ft·lb/in²	30 kJ/m²	
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	419 °F	215 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	392 °F	200 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	437 °F	225 °C	ISO 306/A50
--	401 °F	205 °C	ISO 306/B50
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Comparative Tracking Index	375 V	375 V	IEC 60112
Flammability	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Flame Rating			
0.031 in (0.8 mm)	V-0	V-0	UL 94
0.06 in (1.6 mm)	V-0	V-0	UL 94 IEC 60695-11-10, -20
0.13 in (3.2 mm)	V-0	V-0	UL 94 IEC 60695-11-10, -20
0.03 in (0.8 mm)	V-0	V-0	IEC 60695-11-10, -20
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	

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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)	1430 °F	775 °C	

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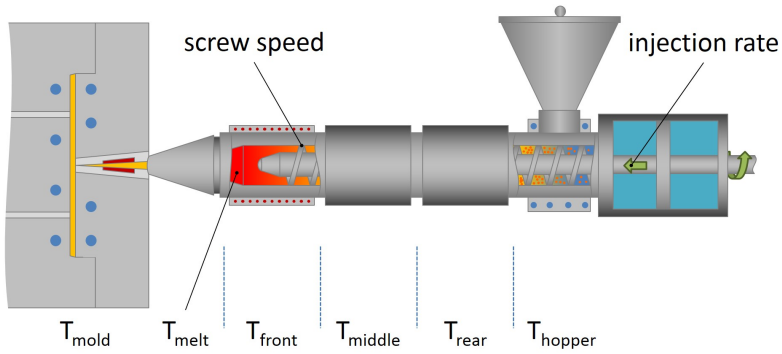

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Suggested Max Regrind	25 %	25 %
Processing (Melt) Temp	464 to 518 °F	240 to 270 °C
Mold Temperature	140 to 212 °F	60 to 100 °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

[1] 0.079 in/min (2.0 mm/min)

Notes

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