

Technical Data Sheet

SCHULAMID[®] 6 GF 15 4DD

Polyamide 6
Engineering Plastics

Product Description

15% glass fibre reinforced flame-retardant Polyamide 6 grade; halogen free; very good surface appearance

General

Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight
Features	• Flame Retardant • Halogen Free
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6 GF15 FR(40)

Physical **Dry** **Conditioned** **Unit** **Test Method**

Density	1.38	--	g/cm ³	ISO 1183/A
Viscosity Number	145	--	cm ³ /g	ISO 307

Mechanical **Dry** **Conditioned** **Unit** **Test Method**

Tensile Modulus	1.02E+6 (7000)	--	psi (MPa)	ISO 527-2/1A/1
Tensile Stress (Break)	13800 (95.0)	--	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	2.8	--	%	ISO 527-2/1A/5

Impact **Dry** **Conditioned** **Unit** **Test Method**

Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	2.4 (5.0)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	3.6 (7.5)	--	ft·lb/in ² (kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	21 (45)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	24 (50)	--	ft·lb/in ² (kJ/m ²)	

Thermal **Dry** **Conditioned** **Unit** **Test Method**

Heat Deflection Temperature				
66 psi (0.45 MPa), Unannealed	423 (217)	--	°F (°C)	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	387 (197)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	423 (217)	--	°F (°C)	ISO 306/A50
--	414 (212)	--	°F (°C)	ISO 306/B50
Ball Pressure Test (257°F (125°C))	Pass	--		IEC 60695-10-2

Electrical **Dry** **Conditioned** **Unit** **Test Method**

Comparative Tracking Index	600	--	V	IEC 60112
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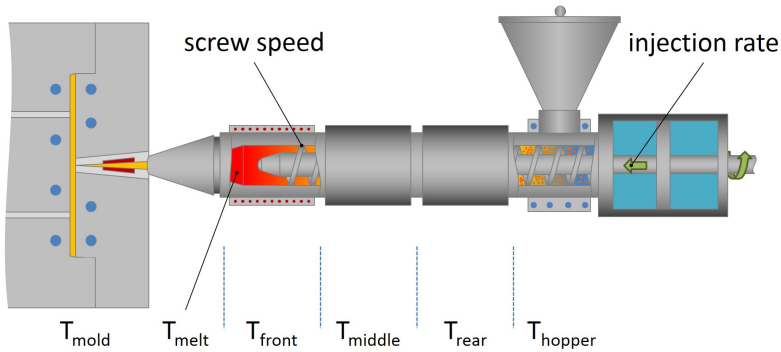
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Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
				ISO 3795
0.0295 in (0.750 mm), Self-Extinguishing	0.0	--	in/min (mm/min)	
0.0591 in (1.50 mm), Self-Extinguishing	0.0	--	in/min (mm/min)	
0.118 in (3.00 mm), Self-Extinguishing	0.0	--	in/min (mm/min)	
Flammability Classification				
				IEC 60695-11-10, -20
0.030 in (0.75 mm)	V-0	--		
0.06 in (1.5 mm)	V-0	--		
0.12 in (3.0 mm)	V-0	--		
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)	

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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 %
Hopper Temperature	158 °F	70 °C
Processing (Melt) Temp	482 to 536 °F	250 to 280 °C
Mold Temperature	140 to 212 °F	60 to 100 °C
Injection Rate	Moderate	Moderate
Screw Speed	< 709 in/min	< 18 m/min

Notes

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