Technical Data Sheet

SCHULAMID® 6 MT 25 FR

Polyamide 6
Engineering Plastics

Product Description
25% mineral filled flame-retardant Polyamide 6 compound with low warpage; halogen free

General		
Filler / Reinforcement	• Mineral, 25% Filler by Weight	
Features	• Flame Retardant • Good Electrical Properties	• Halogen Free • Low (to None) Phosphorus Content
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• PA6 MD25 FR(30)	

Physical	Dry	Conditioned	Unit	Test Method
Density	1.33	--	g/cm³	ISO 1183/A
Molding Shrinkage	0.60 to 0.90	--	%	ISO 294-4
Viscosity Number	145	--	cm³/g	ISO 307
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.06E+6 (7300)	305000 (2100)	psi (MPa)	ISO 527-2/1A/1
Tensile Stress (Break)	11600 (80.0)	3920 (27.0)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	2.5	63	%	ISO 527-2/1A/5
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	1.9 (4.0)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	1.9 (4.0)	3.3 (7.0)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	17 (35)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	15 ft·lb/in² (32 kJ/m²)	No Break	(kJ/m²)	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
66 psi (0.45 MPa), Unannealed	392 (200)	--	°F (°C)	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	248 (120)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	419 (215)	--	°F (°C)	ISO 306/A50
--	392 (200)	--	°F (°C)	ISO 306/B50

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Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	> 1.0E+15	--	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	--	ohms·m	IEC 62631-3-1
Comparative Tracking Index	525	--	V	IEC 60112
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)	
Flame Rating				UL 94 IEC 60695-11-10, -20
0.030 in (0.75 mm)	V-2	--		
0.06 in (1.5 mm)	V-2	--		
0.12 in (3.0 mm)	V-2	--		
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)	1290 (700)	--	°F (°C)	
0.06 in (1.5 mm)	1290 (700)	--	°F (°C)	
0.12 in (3.0 mm)	1290 (700)	--	°F (°C)	
Oxygen Index	27	--	%	ISO 4589-2

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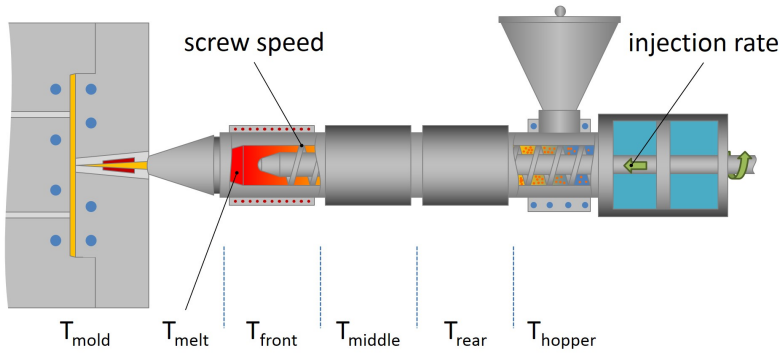

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Suggested Max Regrind	25 %	25 %
Processing (Melt) Temp	464 to 500 °F	240 to 260 °C
Mold Temperature	140 to 212 °F	60 to 100 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Screw Speed	< 591 in/min	< 15 m/min

Notes

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