Technical Data Sheet

Schulamid 6 GF 30 FR 4

Polyamide 6
LyondellBasell Industries
Engineering Plastics

Product Description
30% glass fibre reinforced flame-retardant halogenated Polyamide 6 grade; without PBDE

General		
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight	
Features	• Flame Retardant	• Good Strength
UL File Number	• E86615	
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• PA6 GF30 FR(17)	

Physical	Dry	Conditioned	Unit	Test Method
Density	1.55	--	g/cm³	ISO 1183/A
Viscosity Number	145	--	cm³/g	ISO 307
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.38E+6 (9500)	986000 (6800)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress (Break)	22500 (155)	15500 (107)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	2.5	5.2	%	ISO 527-2/1A/5
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°f (-30°c)	2.9 (6.0)	--	ft·lb/in² (kJ/m²)	
73°f (23°c)	4.8 (10)	6.2 (13)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°f (-30°c)	28 (58)	--	ft·lb/in² (kJ/m²)	
73°f (23°c)	31 (65)	35 (74)	ft·lb/in² (kJ/m²)	
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Ball Indentation Hardness (H 358/30)	29000 (200)	--	psi (MPa)	ISO 2039-1
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				
66 Psi (0.45 Mpa), Unannealed	421 (216)	--	°F (°C)	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	396 (202)	--	°F (°C)	ISO 75-2/Af
Ball Pressure Test (392°f (200°c))	Pass	--		IEC 60695-10-2
RTI Elec				UL 746B
0.030 In (0.75 Mm)	149 (65.0)	--	°F (°C)	
0.06 In (1.5 Mm)	149 (65.0)	--	°F (°C)	
0.12 In (3.0 Mm)	149 (65.0)	--	°F (°C)	

Technical Data Sheet

Schulamid 6 GF 30 FR 4

Polyamide 6
LyondellBasell Industries
Engineering Plastics

Thermal	Dry	Conditioned	Unit	Test Method
RTI Imp				UL 746B
0.030 In (0.75 Mm)	149 (65.0)	--	°F (°C)	
0.06 In (1.5 Mm)	149 (65.0)	--	°F (°C)	
0.12 In (3.0 Mm)	149 (65.0)	--	°F (°C)	
RTI Str				UL 746B
0.030 In (0.75 Mm)	149 (65.0)	--	°F (°C)	
0.06 In (1.5 Mm)	149 (65.0)	--	°F (°C)	
0.12 In (3.0 Mm)	149 (65.0)	--	°F (°C)	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	> 1.0E+15	> 1.0E+12	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	> 1.0E+10	ohms·m	IEC 62631-3-1
Comparative Tracking Index	250	--	V	IEC 60112
High Amp Arc Ignition (HAI)				UL 746A
0.030 In (0.75 Mm)	PLC 0	--		
0.06 In (1.5 Mm)	PLC 0	--		
0.12 In (3.0 Mm)	PLC 0	--		
Hot-wire Ignition (HWI)				UL 746A
0.030 In (0.75 Mm)	PLC 0	--		
0.06 In (1.5 Mm)	PLC 0	--		
0.12 In (3.0 Mm)	PLC 0	--		
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-0	--		
0.06 In (1.5 Mm)	V-0	--		
0.12 In (3.0 Mm)	V-0	--		

Technical Data Sheet

Schulamid 6 GF 30 FR 4

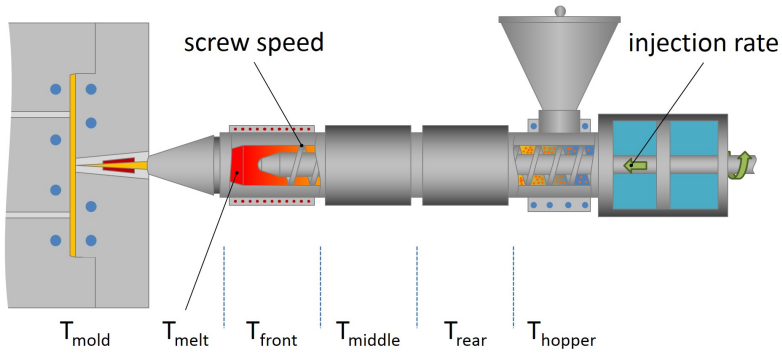
Polyamide 6
LyondellBasell Industries
Engineering Plastics

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)	1520 (825)	--	°F (°C)	
0.06 In (1.5 Mm)	1520 (825)	--	°F (°C)	
0.12 In (3.0 Mm)	1520 (825)	--	°F (°C)	
Oxygen Index	30	--	%	ISO 4589-2

Technical Data Sheet

Schulamid 6 GF 30 FR 4

Polyamide 6
LyondellBasell Industries
Engineering Plastics



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 %
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
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.