Technical Data Sheet

Schulamid 6 HV 0 H FR

Polyamide 6
LyondellBasell Industries
Engineering Plastics

Product Description
High viscosity flame-retardant and heat stabilized Polyamide 6 grade; halogen- and phosphorus-free

General			
Features	• Flame Retardant • Halogen Free	• Heat Stabilized • High Viscosity	• Low (to None) Phosphorus Content
UL File Number	• E86615		
Processing Method	• Extrusion	• Injection Molding	
Resin ID (ISO 1043)	• PA6 FR(30)		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.20	--	g/cm³	ISO 1183/A
Viscosity Number	195	--	cm³/g	ISO 307
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	464000 (3200)	174000 (1200)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress (Yield)	10900 (75.0)	7250 (50.0)	psi (MPa)	ISO 527-2/1A/50
Tensile Strain (Yield)	4.0	> 50	%	ISO 527-2/1A/50
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)	2.4 (5.0)	5.7 (12)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°f (-30°c)	No Break	--		
73°f (23°c)	No Break	No Break		
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				
66 Psi (0.45 Mpa), Unannealed	387 (197)	--	°F (°C)	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	154 (68.0)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	392 (200)	--	°F (°C)	ISO 306/B50
--	421 (216)	--	°F (°C)	ISO 306/A50
Ball Pressure Test (392°f (200°c))	Pass	--		IEC 60695-10-2

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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
Electric Strength	790 (31)	710 (28)	V/mil (kV/mm)	IEC 60243-1
Comparative Tracking Index	600	--	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)	
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)	1340 (725)	--	°F (°C)	
0.06 In (1.5 Mm)	1340 (725)	--	°F (°C)	
0.12 In (3.0 Mm)	1340 (725)	--	°F (°C)	
Oxygen Index	34	--	%	ISO 4589-2

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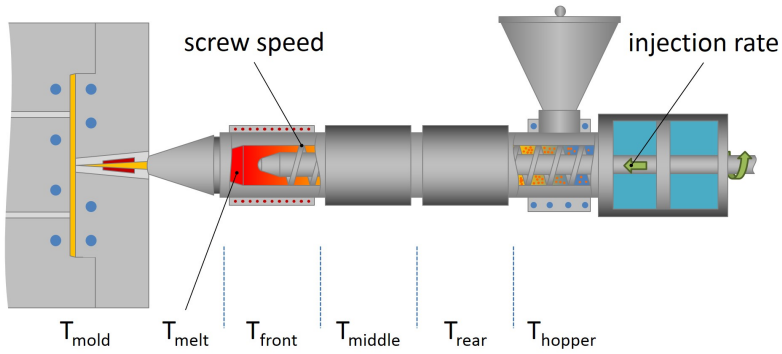

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Processing (Melt) Temp	446 to 500 °F	230 to 260 °C
Mold Temperature	140 to 194 °F	60 to 90 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Back Pressure	290 to 1160 psi	2.00 to 8.00 MPa
Back Pressure	290 to 1160 psi	2.00 to 8.00 MPa
Screw Speed	591 in/min	15 m/min

Injection Notes

During transport one component of the dryblend can go more to the bottom. It is therefore recommended to tumble the material before use to assure an even distribution of the dryblend components.

Notes

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