Technical Data Sheet

Schulamid 66 GBF 3020 FR 4

Polyamide 66
LyondellBasell Industries
Engineering Plastics

Product Description
30% glass fibre and glass beads reinforced flame-retardant Polyamide 66 grade with low warpage high mechanical stability and high dimension stability, without PBDE

General		
Filler / Reinforcement	• Glass Bead\Glass Fiber, 30% Filler by Weight	
Features	• Flame Retardant	• Low Warpage
UL File Number	• E86615	
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• PA66 (GF+GB)30 FR(17)	

Physical	Dry	Conditioned	Unit	Test Method
Density	1.59	--	g/cm³	ISO 1183/A
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.26E+6 (8700)	725000 (5000)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress (Break)	20300 (140)	13300 (92.0)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	2.5	4.5	%	ISO 527-2/1A/5
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°f (-30°c)	2.1 (4.5)	--	ft·lb/in² (kJ/m²)	
73°f (23°c)	2.6 (5.5)	3.3 (7.0)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°f (-30°c)	18 (38)	--	ft·lb/in² (kJ/m²)	
73°f (23°c)	20 (42)	24 (51)	ft·lb/in² (kJ/m²)	

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
66 Psi (0.45 Mpa), Unannealed	> 482 (> 250)	--	°F (°C)	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	435 (224)	--	°F (°C)	ISO 75-2/Af
Ball Pressure Test (392°f (200°c))	Pass	--		IEC 60695-10-2
RTI Elec				UL 746B
0.06 In (1.5 Mm)	149 (65.0)	--	°F (°C)	
0.12 In (3.0 Mm)	149 (65.0)	--	°F (°C)	
RTI Imp				UL 746B
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
0.06 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	> 7.8E+12	--	ohms	IEC 60093
Volume Resistivity	> 9.9E+13	--	ohms·m	IEC 62631-3-1
Electric Strength	560 (22)	--	V/mil (kV/mm)	IEC 60243-1
Relative Permittivity				IEC 60250
100 Hz	4.81	--		
1 Mhz	3.85	--		
Dissipation Factor				IEC 60250
100 Hz	0.049	--		
1 Mhz	0.022	--		
Comparative Tracking Index (Solution A)	175	--	V	IEC 60112

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Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				ISO 3795
0.0787 In (2.00 Mm), Self-extinguishing	0.0	--	in/min (mm/min)	
Flame Rating				UL 94 IEC 60695-11-10, -20
0.06 In (1.5 Mm)	V-0	--		
0.12 In (3.0 Mm)	V-0	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.06 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
0.06 In (1.5 Mm)	1380 (750)	--	°F (°C)	
0.12 In (3.0 Mm)	1380 (750)	--	°F (°C)	
Oxygen Index	38	--	%	ISO 4589-2

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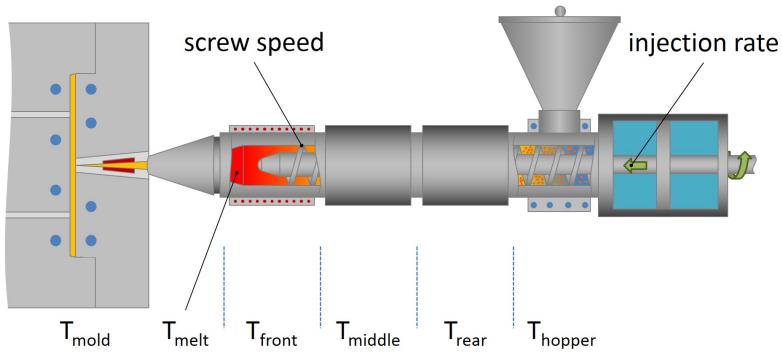

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Processing (Melt) Temp	518 to 572 °F	270 to 300 °C
Mold Temperature	140 to 194 °F	60 to 90 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Back Pressure	290 to 1160 psi	2.00 to 8.00 MPa
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.