

Technical Data Sheet

Schulamid 6 GF 30 H

Polyamide 6
LyondellBasell Industries
Engineering Plastics

Product Description

30% glass fiber reinforced, heat stabilized Polyamide 6

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Good Toughness • Heat Aging Resistant	• High Stiffness • Oil Resistant	
Automotive Specifications	• FORD WSK-M4D664-A • FORD WSS-M4D993-B1	• GM GMP.PA6.054 Color: Black • GM GMP.PA6.054 Color: Natural	• GM GMP.PA6.056 Color: Black • GM GMP.PA6.056 Color: Natural
UL File Number	• E86615		
Processing Method	• Injection Molding		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.35	--	g/cm ³	ISO 1183/A
Water Absorption				ISO 62
Equilibrium, 73°F (23°C), 50% Rh	2.0	--	%	
Viscosity Number	145	--	cm ³ /g	ISO 307

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.38E+6 (9500)	725000 (5000)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress (Break)	24700 (170)	14500 (100)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	3.5	8.0	%	ISO 527-2/1A/5
Flexural Modulus	1.13E+6 (7800)	--	psi (MPa)	ISO 178
Flexural Stress	30500 (210)	--	psi (MPa)	ISO 178
Flexural Strain at Flexural Strength	3.7	--	%	ISO 178

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	4.3 (9.0)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	5.7 (12)	14 (30)	ft·lb/in ² (kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	29 (60)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	38 ft·lb/in ² (80 kJ/m ²)	No Break	(kJ/m ²)	

Hardness	Dry	Conditioned	Unit	Test Method
Ball Indentation Hardness (H 358/30)	29000 (200)	--	psi (MPa)	ISO 2039-1

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
66 Psi (0.45 Mpa), Unannealed	428 (220)	--	°F (°C)	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	401 (205)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	410 (210)	--	°F (°C)	ISO 306/B50
--	423 (217)	--	°F (°C)	ISO 306/A50
RTI Elec				
0.030 In (0.75 Mm)	257 (125)	--	°F (°C)	UL 746B
0.06 In (1.5 Mm)	257 (125)	--	°F (°C)	
0.12 In (3.0 Mm)	257 (125)	--	°F (°C)	
RTI Imp				
0.030 In (0.75 Mm)	239 (115)	--	°F (°C)	UL 746B
0.06 In (1.5 Mm)	248 (120)	--	°F (°C)	
0.12 In (3.0 Mm)	257 (125)	--	°F (°C)	
RTI Str				
0.030 In (0.75 Mm)	266 (130)	--	°F (°C)	UL 746B
0.06 In (1.5 Mm)	266 (130)	--	°F (°C)	
0.12 In (3.0 Mm)	266 (130)	--	°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	450	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 In (2.00 Mm)	1.2 (30)	--	in/min (mm/min)	ISO 3795
0.0787 In (2.00 Mm)	1.2 (30)	--	in/min (mm/min)	FMVSS 302
Flammability Classification				
0.030 In (0.75 Mm)	HB	--		IEC 60695-11-10, -20
0.06 In (1.5 Mm)	HB	--		
0.12 In (3.0 Mm)	HB	--		

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Injection	Dry (English)	Dry (SI)
Drying Temperature - Desiccant Dryer	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	482 to 536 °F	250 to 280 °C
Mold Temperature	140 to 212 °F	60 to 100 °C

Notes

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