

Technical Data Sheet

# Schulamid 66 GRF 2318 H

Polyamide 66  
LyondellBasell Industries  
Engineering Plastics

**Product Description**

23% glass fibre and graphite reinforced Polyamide 66 with optimized wear and friction behaviour

**General**

Filler / Reinforcement	• Glass\Graphite, 23% Filler by Weight
Features	• Good Processability • Low Warpage • Heat Aging Resistant • Lubricated • Oil Resistant
Automotive Specifications	• GM GMW15702-023221 PA66-(GF18+CD5) Color: 96.8035 Anthracite
Processing Method	• Injection Molding

Physical	Dry	Conditioned	Unit	Test Method
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Density	1.30	--	g/cm <sup>3</sup>	ISO 1183/A
Water Absorption				ISO 62
Equilibrium, 73°F (23°C), 50% Rh	2.2	--	%	
Viscosity Number	145	--	cm <sup>3</sup> /g	ISO 307

Mechanical	Dry	Conditioned	Unit	Test Method
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Tensile Modulus	1.09E+6 (7500)	696000 (4800)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress (Break)	20300 (140)	12300 (85.0)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	8.0	%	ISO 527-2/1A/5

Impact	Dry	Conditioned	Unit	Test Method
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Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	2.9 (6.0)	--	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
73°F (23°C)	3.3 (7.0)	3.8 (8.0)	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	19 (40)	--	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
73°F (23°C)	21 (45)	33 (70)	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	

Hardness	Dry	Conditioned	Unit	Test Method
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Ball Indentation Hardness (H 358/30)	26100 (180)	16000 (110)	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	> 482 (> 250)	--	°F (°C)	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	464 (240)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	473 (245)	--	°F (°C)	ISO 306/B50
--	> 482 (> 250)	--	°F (°C)	ISO 306/A50
Ball Pressure Test (230°f (110°c))	Pass	--		IEC 60695-10-2
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
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 In (2.00 Mm)	1.6 (40)	--	in/min (mm/min)	ISO 3795
0.0787 In (2.00 Mm)	1.6 (40)	--	in/min (mm/min)	FMVSS 302
Flammability Classification				
0.06 In (1.5 Mm)	HB	--		IEC 60695-11-10, -20
0.12 In (3.0 Mm)	HB	--		
Glow Wire Flammability Index				
0.06 In (1.5 Mm)	1200 (650)	--	°F (°C)	IEC 60695-2-12
0.12 In (3.0 Mm)	1200 (650)	--	°F (°C)	

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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 %
Processing (Melt) Temp	536 to 572 °F	280 to 300 °C
Mold Temperature	140 to 248 °F	60 to 120 °C

**Notes**

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