

Technical Data Sheet

Schulamid XM GF 50 BLACK

Polyamide 66 + PA 6I/6T
LyondellBasell Industries
Engineering Plastics

Product Description

50% glassfiber reinforced semi-aromatic Polyamide Compound with excellent rigity and strength, also if conditioned. Able for Substitution Die Cast Metal.

General

Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA 66 + PA 6I/6T

Physical	Dry	Conditioned	Unit	Test Method
Density	1.59	--	g/cm ³	ISO 1183/A
Water Absorption				ISO 62
Equilibrium, 73°F (23°C), 50% Rh	3.5 to 4.0	--	%	

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	2.54E+6 (17500)	2.39E+6 (16500)	psi (MPa)	ISO 527-1/1
Tensile Stress (Break)	36300 (250)	31900 (220)	psi (MPa)	ISO 527-2/5
Tensile Strain (Break)	3.0	3.0	%	ISO 527-2/5
Flexural Modulus	2.38E+6 (16400)	--	psi (MPa)	ISO 178
Flexural Stress ¹	55100 (380)	--	psi (MPa)	ISO 178

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				
-22°F (-30°C)	7.1 (15)	--	ft·lb/in ² (kJ/m ²)	ISO 179/1eC
73°F (23°C)	8.1 (17)	8.1 (17)	ft·lb/in ² (kJ/m ²)	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	45 (95)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	52 (110)	48 (100)	ft·lb/in ² (kJ/m ²)	

Hardness	Dry	Conditioned	Unit	Test Method
Ball Indentation Hardness (H 931/30)	42100 (290)	--	psi (MPa)	ISO 2039-1

Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
66 Psi (0.45 Mpa), Unannealed	473 (245)	--	°F (°C)	ISO 75-2/B
264 Psi (1.8 Mpa), Unannealed	437 (225)	--	°F (°C)	ISO 75-2/A

Technical Data Sheet

Schulamid XM GF 50 BLACK

Polyamide 66 + PA 6I/6T
LyondellBasell Industries
Engineering Plastics

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 (Solution A)	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 In (2.00 Mm)	< 3.9 (< 100)	--	in/min (mm/min)	ISO 3795
0.0787 In (2.00 Mm)	< 3.9 (< 100)	--	in/min (mm/min)	FMVSS 302
Flammability Classification				IEC 60695-11-10, -20
0.06 In (1.5 Mm)	HB	--		
0.12 In (3.0 Mm)	HB	--		

Technical Data Sheet

Schulamid XM GF 50 BLACK

Polyamide 66 + PA 6I/6T
LyondellBasell Industries
Engineering Plastics



Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 6.0 hr	3.0 to 6.0 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	176 to 248 °F	80 to 120 °C

Notes

¹ 0.079 in/min (2.0 mm/min)

Notes

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