

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

Material Status	• Commercial: Active
Availability	• Europe
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

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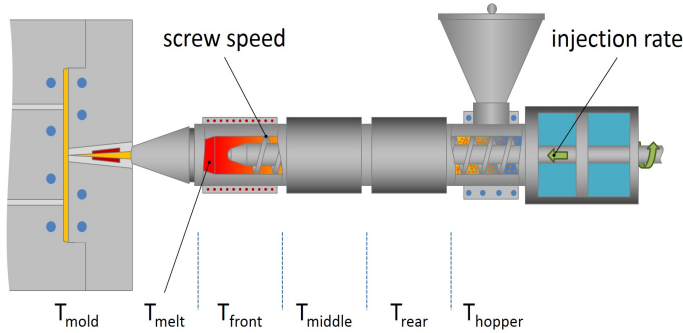
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	> 1.0E+15	> 1.0E+12	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	> 1.0E+10	ohms·m	IEC 62631-3-1
Comparative Tracking Index (Solution A)	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 in (2.00 mm)	< 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	--		

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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

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Notes

¹ 0.079 in/min (2.0 mm/min)

Notes

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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