Technical Data Sheet

SCHULAMID® 66 CF 20 H Black

Polyamide 66
Engineering Plastics

Product Description
20% carbon fiber reinforced Polyamide 66, available with different kinds of heat stabilizations systems

General	
Filler / Reinforcement	• Carbon Fiber, 20% Filler by Weight
Processing Method	• Injection Molding

Physical	Dry	Conditioned	Unit	Test Method
Density	1.22	--	g/cm³	ISO 1183/A
Molding Shrinkage				ISO 294-4
Across Flow	0.80	--	%	
Flow	0.30	--	%	
Viscosity Number	145	--	cm³/g	ISO 307
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	2.41E+6 (16600)	1.46E+6 (10100)	psi (MPa)	ISO 527-2/1A/1
Tensile Stress (Break)	31900 (220)	21800 (150)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	2.8	5.3	%	ISO 527-2/1A/5
Flexural Modulus [1]	2.18E+6 (15000)	--	psi (MPa)	ISO 178
Flexural Stress [1]				ISO 178
3.0% Strain	49300 (340)	--	psi (MPa)	
3.0% Strain [2]	47900 (330)	--	psi (MPa)	
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)	3.3 (7.0)	5.7 (12)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	24 (50)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	33 (70)	43 (90)	ft·lb/in² (kJ/m²)	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				ISO 75-2/Af
264 psi (1.8 MPa), Unannealed	482 (250)	--	°F (°C)	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	1.0E+3	--	ohms	IEC 60093
Volume Resistivity	1.0E+2	--	ohms·m	IEC 62631-3-1

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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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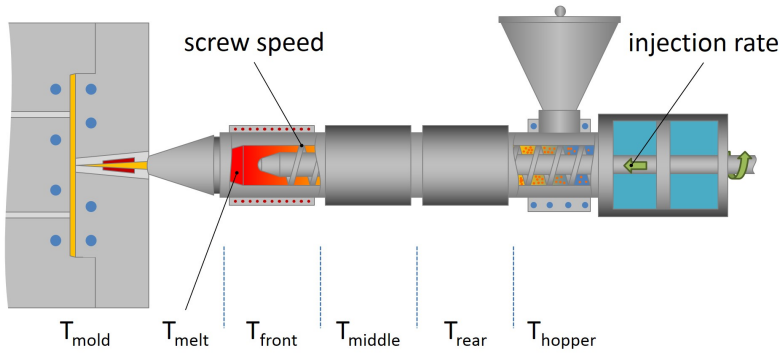

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Suggested Max Regrind	20 %	20 %
Processing (Melt) Temp	536 to 572 °F	280 to 300 °C
Mold Temperature	140 to 248 °F	60 to 120 °C

Notes

[1] 0.079 in/min (2.0 mm/min)

[2] at Break

Notes

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