

Starex GR-4020L

Acrylonitrile Butadiene Styrene

SAMSUNG SDI CO., LTD.

Message:

ABS/GF material that is applied to printer LBP fuser

General Information			
UL YellowCard	E115797-219535		
Filler / Reinforcement	Glass Fiber		
Uses	Electrical Housing		
	Electrical/Electronic Applications		

Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.18	g/cm ³	ASTM D792
--	1.19	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)			
220°C/10.0 kg	7.0	g/10 min	ASTM D1238
220°C/10.0 kg	9.0	g/10 min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.10 to 0.30	%	ASTM D955
Ash Content	20	%	ISO 3451

Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	112		ASTM D785, ISO 2039-2

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	5300	MPa	ASTM D638
--	5600	MPa	ISO 527-2/50
Tensile Strength			
Yield ²	88.0	MPa	ASTM D638
Yield	88.0	MPa	ISO 527-2/50
Break ³	86.0	MPa	ASTM D638
Break	88.0	MPa	ISO 527-2/50
Tensile Elongation			
Break ⁴	2.5	%	ASTM D638
Break	2.5	%	ISO 527-2/50
Flexural Modulus			
-- ⁵	5300	MPa	ASTM D790
--	6400	MPa	ISO 178
Flexural Strength			
-- ⁶	110	MPa	ASTM D790

--	125	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁷ (23°C)	9.0	kJ/m ²	ISO 179/1eA
Notched Izod Impact			
23°C, 3.18 mm	67	J/m	ASTM D256
23°C, 6.35 mm	68	J/m	ASTM D256
23°C ⁸	7.9	kJ/m ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 6.40 mm	104	°C	ASTM D648
0.45 MPa, Unannealed, 4.00 mm	103	°C	ISO 75-2/B
1.8 MPa, Unannealed, 6.40 mm	100	°C	ASTM D648
1.8 MPa, Unannealed, 4.00 mm	97.0	°C	ISO 75-2/A
Vicat Softening Temperature			
--	103	°C	ISO 306/B50
--	106	°C	ISO 306/B120
Flammability	Nominal Value		Test Method
Flame Rating			UL 94
1.50 mm	HB		
3.00 mm	HB		
6.00 mm	HB		
Injection	Nominal Value	Unit	
Drying Temperature			
--	80.0	°C	
Desiccant Dryer	80.0	°C	
Drying Time			
--	2.0 to 4.0	hr	
Desiccant Dryer	2.0 to 3.0	hr	
Suggested Max Moisture	< 0.050	%	
Rear Temperature	180 to 190	°C	
Middle Temperature	200 to 210	°C	
Front Temperature	220 to 230	°C	
Nozzle Temperature	240	°C	
Mold Temperature	40.0 to 80.0	°C	
Injection Pressure	49.0 to 245	MPa	
Back Pressure	0.490 to 1.96	MPa	
Screw Speed	50 to 150	rpm	
NOTE			
1.	5.0 mm/min		
2.	5.0 mm/min		
3.	5.0 mm/min		
4.	5.0 mm/min		

5.	2.8 mm/min
6.	2.8 mm/min
7.	Thickness: 4 mm
8.	Thickness: 4 mm

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

