

Property Table of GGF022J *

Properties	Test Method	Test Condition	Unit	
	GGF022J			
Melt Flow Rate				
ISO 1133/ASTM D1238/GB3682-83	6	200 °C, 10 kg	g/10min	
	1	230 °C, 2.16 kg		
Density				
D792/GB3682-83	ISO 1183/ASTM 1.33		g/cm	3
Tensile Strength				
D638/GB1040-79	ISO 527/ASTM 23 °C, 50%		56	MPa
Tensile Modulus				
	5,100			
Tensile Elongation				
	2.9		%	
Flexural Strength				
D790/GB9341-88	ISO 178/ASTM 23 °C, 50%		81	MPa
Flexural Modulus				
	4,600			
Flexural Elongation				
	3.6		%	
Charpy impact, notched				
	ISO 179 – 1 / 1eA	23 °C, 50%	22	
Charpy impact, notched				
	ISO 179 – 1 / 1eA		3.5	kJ/m

Heat Deflection Temperature				
□□□□□	ISO 75 /			
ASTM D648	0.45 MPa	151		°C
	1.82 MPa	129		
Shrinkage				
□□□	0.2 – 0.5		%	
Flammability UL94				
□□□	IEC60695-11-10	4mm		5VB
	2.5mm	V0		
	1.5mm			
V0				

[Property Table of GGN023J *](#)

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Melt Flow Rate			
□□□□□□□□			
ISO 1133/ASTM			
D1238/GB3682-83			
200 °C, 10 kg	7		
g/10min			
230 °C, 2.16 kg	2		
Density			
□□	ISO 1183/ASTM		
D792/GB3682-83			
1.04	g/cm		3
Tensile Strength			
□□□□	ISO 527/ASTM		
D638/GB1040-79	23 °C, 50%		56
MPa			

Tensile Modulus			
□□□□	4,100		
Tensile Elongation			
□□□□	3.8	%	
Flexural Strength			
□□□□	ISO 178/ASTM		
D790/GB9341-88	23 °C, 50%	79	
MPa			
Flexural Modulus			
□□□□	3,300		
Flexural Elongation			
□□□□□	4.5	%	
Charpy impact, notched			
□□□□□□	ISO 179 – 1 / 1eA	23 °C, 50%	22
kJ/m			
	2		
Charpy impact, notched			
□□□□□□	ISO 179 – 1 / 1eA	4	
kJ/m			
	2		
Heat Deflection Temperature			
□□□□□	ISO 75 /		
ASTM D648	0.45 MPa	151	°C
1.82 MPa			
	97		
Shrinkage			
□□□			
0.2 – 0.5			
	%		

[Property Table of GGN026J *](#)

Properties	Test Method	Test Condition	Unit
□□	GGF022J		
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□□			
□□			
Melt Flow Rate			
□□□□□□□□			
ISO 1133/ASTM			
D1238/GB3682-83			
200 °C, 10 kg	5		
g/10min			
230 °C, 2.16 kg	1		

Density			
□□	ISO 1183/ASTM		
D792/GB3682-83			
1.11	g/cm	3	
Tensile Strength			
□□□□	ISO 527/ASTM		
D638/GB1040-79	23° C, 50%	62	
MPa			
Tensile Modulus			
□□□□	5,400		
Tensile Elongation			
□□□□	2.3	%	
Flexural Strength			
□□□□	ISO 178/ASTM		
D790/GB9341-88	23° C, 50%	89	
MPa			
Flexural Modulus			
□□□□	4,900		
Flexural Elongation			
□□□□□	2.9	%	
Charpy impact, notched			
□□□□□□	ISO 179 – 1 / 1eA	23° C, 50%	2122
kJ/m	²		
Charpy impact, notched			
□□□□□□	ISO 179 – 1 / 1eA	4	
kJ/m	²		
Heat Deflection Temperature			
□□□□□	ISO 75 /		
ASTM D648	0.45 MPa	156	°C
1.82 MPa	134		
Shrinkage			
□□□			
0.2 – 0.5	%		

* The above values are obtained by testing under standard room temperature. These values are only for reference and not definitive. Changes in working condition may result in end product characteristics which may deviate from above.

OTHER PROPERTIES of GG NFR PP

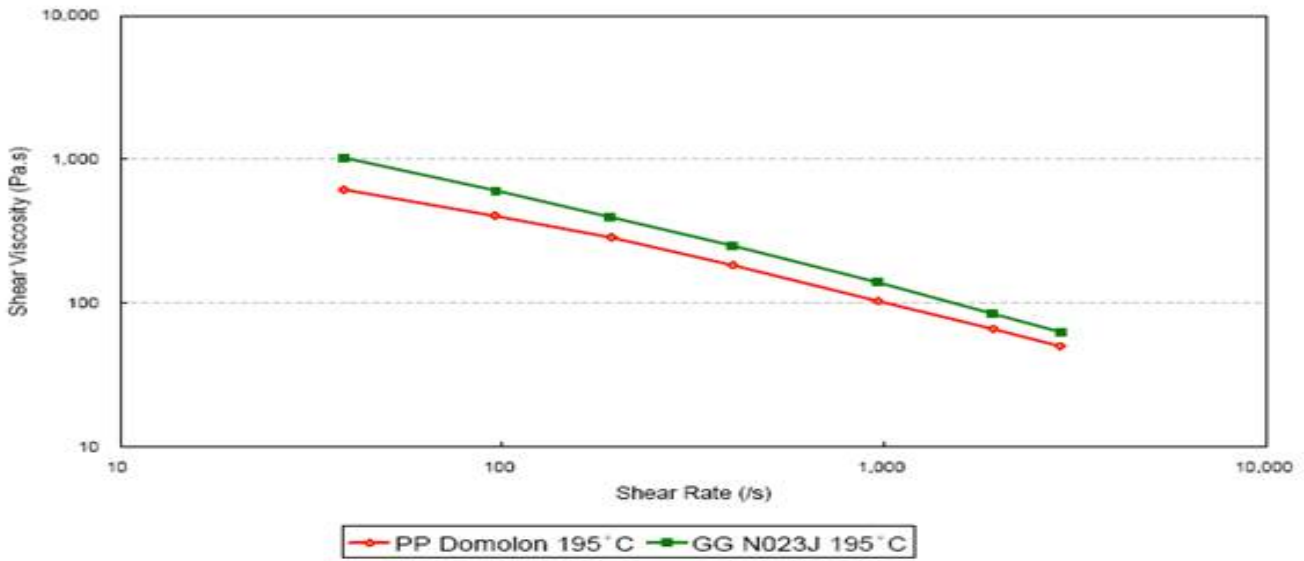


□ Flame Test

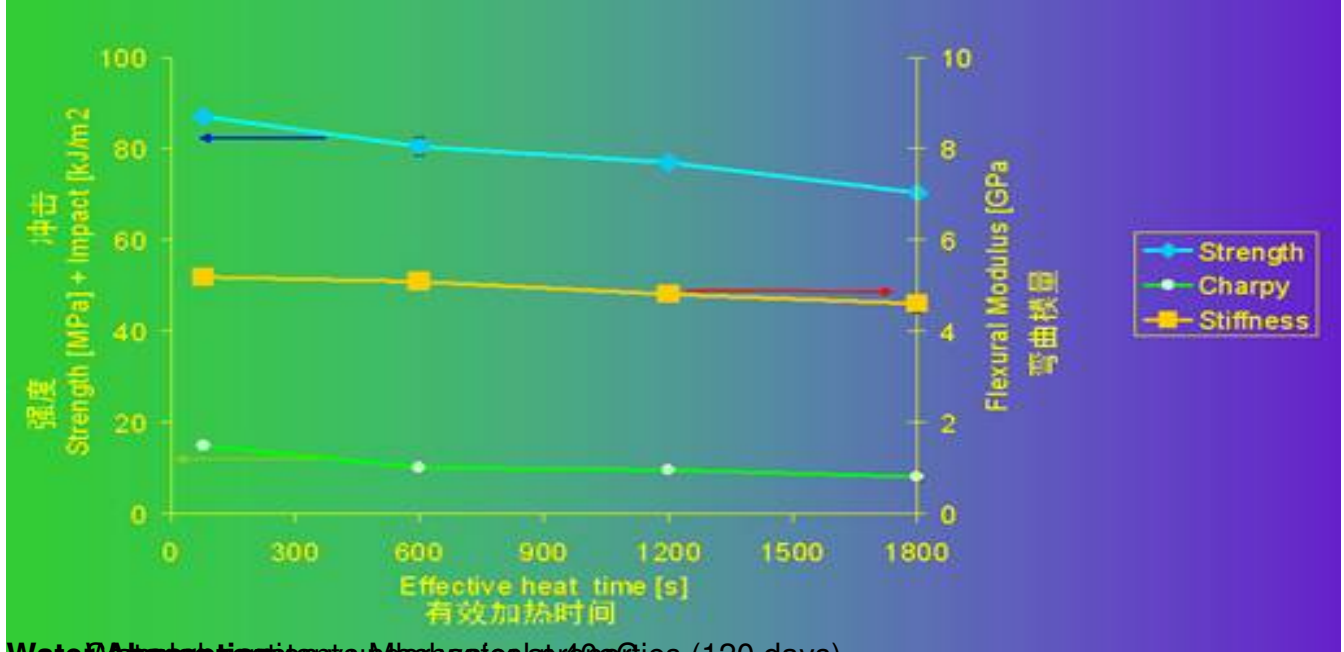
- Test according to UL94
- GG NF50PP: 50% Nature Fiber (Flex)
- Flame Retardant: Halogen, aluminum, Magnesium free
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-

Rheology: Rosand Capillary Rheometer

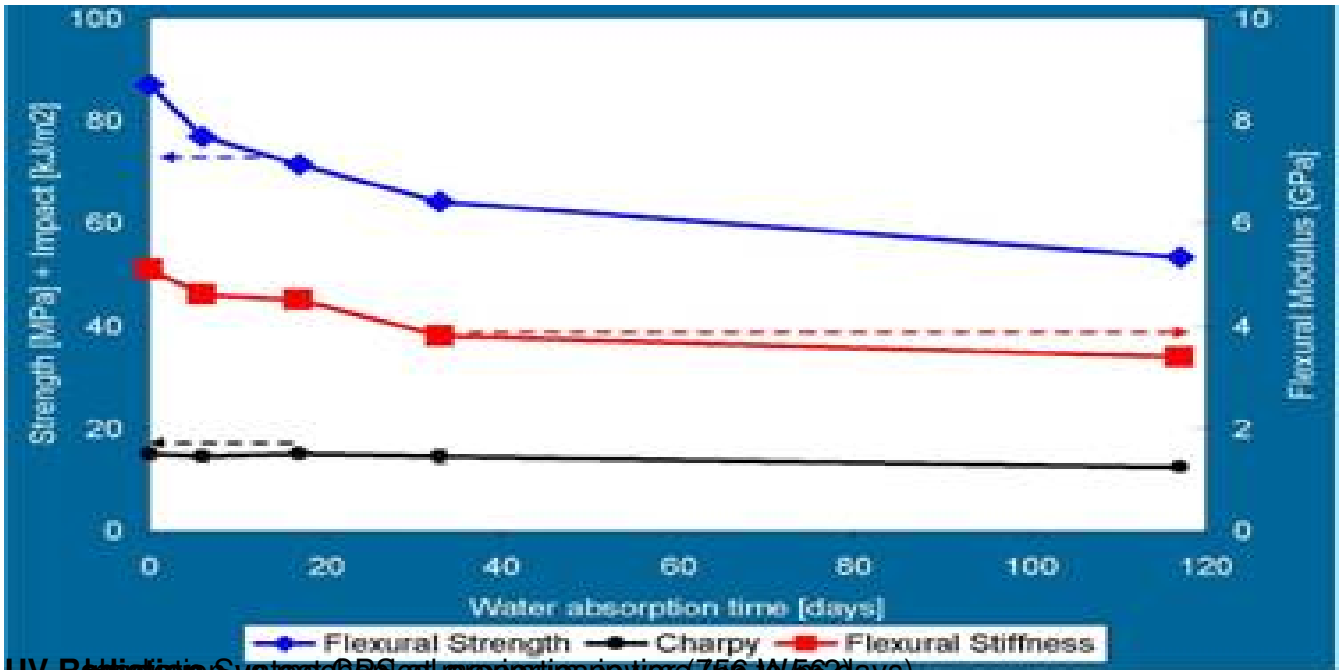
Rheograms



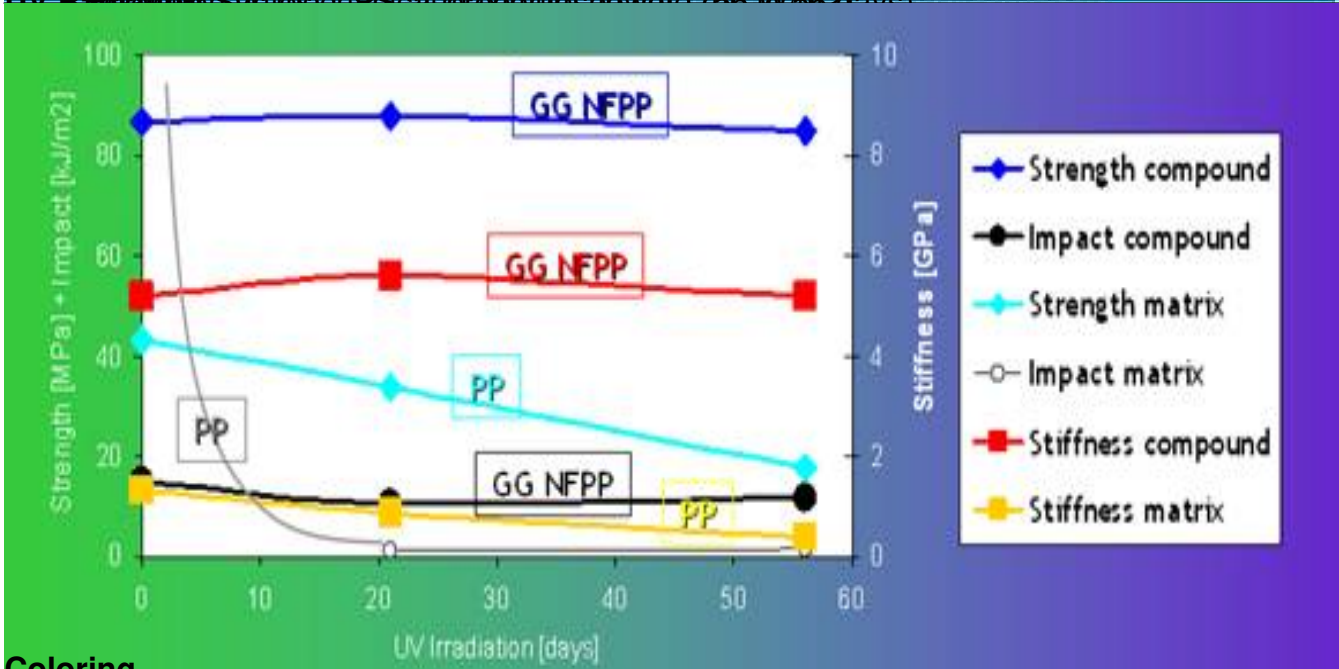
Machine Residence Time: Hot Melting Injection Machine at 200°C & up to 30 minutes



Water Absorption vs Mechanical Properties (120 days)



UV Radiation System: GDS cell, irradiance density: (756 W/562) lux



Coloring

Properties of GG NFRPP

1.	GG NF50PP - 11 10% 增白	
2.	GG NF50PP - 4 2% 增白 - 3%黃	
3.	GG NF50PP - 9 2% 增白 - 5%藍	
4.	GG NF50PP - 10 2% 增白 - 3%紅	
5.	GG NF50PP - 7 5%紅	
6.	GG NF50PP - 12 5%褐色	

~~For more information of GG NFRPP with much higher than down grade plastics, 100% scrap of GG~~