



SHAMIM
POLYMER

TECHNICAL DATA SHEET

PRODUCT NAME

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PRODUCT OVERVIEW

Product Name:	SHAMIMNANOBLEND ® PP-GF20 N
Product Description:	PP-GF20N is a glass-fiber-reinforced polypropylene compound containing 20% glass fiber. The material provides a combination of high stiffness, good mechanical strength, dimensional stability, and improved heat resistance compared with unreinforced polypropylene.
Product Application:	This grade can be used in the production of automotive parts, household appliances, construction industries, electronic parts, etc.

TYPICAL PROPERTIES

Test Specification	Test Method	Unit	Test Condition	Value
Physical properties				
Density	ISO 1183	g/cm3	23°C	1.07±0.02
Melt Flow Index	ASTM D1238	g/10min	230°C, 2.16 kg	5.0±1.0
Linear molding shrinkage	ISO 294	%	24 h, 23°C	0.7±0.1
Ash content	ASTM D5630	%	700°C, 30min	20±2
Moisture Content	ISO 960	%	105°C, 30 min	0.10±0.03
Mechanical Properties				
Tensile modulus	ASTM D638	MPa	50 mm/min	>6000
Tensile stress at Max.	ASTM D638	MPa	50 mm/min	>85
Tensile strain at break	ASTM D638	%	50 mm/min	4.5±0.5
Flexural modulus	ASTM D790	MPa	2 mm/min	>6500
Flexural stress	ASTM D790	MPa	2 mm/min	>95
notched Izod Impact strength	ASTM D256	kJ/m2	23°C/ 2.71J	15±3
Un-notched Izod Impact strength	ASTM D256	kJ/m2	23°C/ 2.71J	N.B
Thermal Properties				
Heat Deflection Temperature	ASTM D648	°C	0.45 MPa	150±5
Heat Deflection Temperature	ASTM D648	°C	1.82 MPa	140±5
Melting point	ISO 3146	°C	10°C/min	165±3
Flammability	UL94	class	1.6 mm	HB

RECOMMENDED PROCESSING CONDITIONS

Processing parameter		Unit	Value
Drying Temperature		°C	85-90
Drying Time		hrs.	2.0 -4.0
Melt Temperature		°C	165
Cylinder Temperature	Rear	°C	160-180
	Middle	°C	180-200
	Front	°C	200-230
Nozzle Temperature		°C	230-250
Mold Temperature		°C	40-60

DISCLAIMER

The information contained in this Technical Data Sheet is based on our current knowledge and experience. The values shown are typical values and should not be considered as guaranteed specifications. The suitability of the material for a specific application should be evaluated by the customer.

PRODUCT INFORMATION

Form	Granules
Color	Natural
Packaging	25kg. Bag / 1000kg. Jumbo Bag
Storage	Dry and dust free place