



SHAMIM
POLYMER

TECHNICAL DATA SHEET

PRODUCT NAME

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PRODUCT OVERVIEW

Product Name:	SHAMIMNANOBLEND ® PA66-GF50 B
Product Description:	Polyamide 66 reinforced with 50 wt.% glass fiber and nano particles, heat-stabilized, good thermal, mechanical, and impact resistance properties
Product Application:	This grade can be used in the production of heat-resistant 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	1.55±0.05
Linear molding shrinkage	ISO 294	%	24 h, 23°C	0.3±0.1
Ash content	ASTM D5630	%	700°C, 30min	50±3
Humidity absorption	ISO 1110	%	70°C, 62% r.H.	2.0±0.3
Moisture Content	ISO 960	%	105°C, 30 min	0.15±0.03
Mechanical Properties				
Tensile modulus	ASTM D638	MPa	50 mm/min	>12000
Tensile stress at Max.	ASTM D638	MPa	50 mm/min	>210
Tensile strain at break	ASTM D638	%	50 mm/min	3.5±0.5
Flexural modulus	ASTM D790	MPa	2 mm/min	>10000
Flexural stress	ASTM D790	MPa	2 mm/min	>200
notched Izod Impact strength	ASTM D256	kJ/m2	23°C/ 2.71J	18±2
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	260±5
Heat Deflection Temperature	ASTM D648	°C	1.82 MPa	255±5
Melting point	ISO 3146	°C	10°C/min	265±5
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	265
Cylinder Temperature	Rear	°C	260-280
	Middle	°C	270-300
	Front	°C	290-300
Nozzle Temperature		°C	290-300
Mold Temperature		°C	50-80

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	Black
Packaging	25kg. Bag
Storage	Dry and dust free place



ISO 9001:2015



IATF16949:2016



ISO 14001:2015



OHSAS 18001:2008



ISO 10002:2004

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