



GRODNO KHMIVOLOKNO
JOINT STOCK COMPANY
GRODNAMID

GRODNAMID PA6-GF30-1

	Test method	Unit	Value
RHEOLOGICAL PROPERTIES			
Melt Flow Rate (270°C, 2,16 kg load)	ISO 1133	g/10 min	20 – 30
Molding shrinkage (60×60×2 mm)	ISO 294-4	%	0.6 – 0.8
MECHANICAL PROPERTIES			
Tensile strength (5 mm/min)	ISO 527	MPa	145
Elongation at break (5 mm/min)	ISO 527	%	4 – 5
Tensile modulus (1 mm/min)	ISO 527	MPa	8000
Flexural stress (2 mm/min)	ISO 178	MPa	240
Flexural modulus (2 mm/min)	ISO 178	MPa	8200
Charpy impact strength (+23°C)	ISO 179/1eU	kJ/m ²	80
Charpy impact strength (– 30 °C)	ISO 179/1eU	kJ/m ²	–
Charpy notched impact strength (+23°C)	ISO 179/1eA	kJ/m ²	12
Charpy notched impact strength (– 30°C)	ISO 179/1eA	kJ/m ²	–
THERMAL PROPERTIES			
Melting point (10 °C/min)	ISO 3146	°C	217
Temp. of deflection under load			
0.45 MPa	ISO 75-1/-2	°C	200 – 210
1.80 MPa			180 – 190
Vicat softening point (50 °C/h)	ISO 306	°C	–
ELECTRICAL PROPERTIES			
Volume resistivity	IEC 60093	Ohm×m	10 ¹²
Surface resistivity	IEC 60093	Ohm	10 ¹²
Comparative tracking index	IEC 60112		–
OTHER PROPERTIES			
Water absorption, %			
24h/23°C	Sim. to ISO 62	%	1.3
30 min at boiling			1.6
Moisture absorption from air	Sim. to ISO 62	%	2.1
Density	ISO 1183	g/cm ³	1.35



CHARACTERISTICS

Glass fiber reinforced polyamide 6 injection molding compound. The material has chemical resistance to hydrocarbons, mineral oils, concentrated and weak alkalis, weak acids, high electric strength.

APPLICATION

For automotive industry – gears, teeth wheels, bearing cages and other parts. The material is also used in electrical engineering and instrument-making industry.

PREPROCESSING

Processing moisture content < 0.2 %.

If drying becomes necessary:

- drying in dehumidified dryer, drying temperature 80°C,
- drying time is dependent on moisture level.

PROCESSING

Melt temperature 230 ÷ 260 °C. To avoid degradation it is recommended to limit injection molding temperature to 290 °C.

Injection pressure 80 ÷ 130 MPa, recommended 90 MPa.

Mold temperature 50 ÷ 90 °C. A higher mold temperature leads to higher shrinkage.

COLOUR

The material is available in pigmented version.

RECYCLING

Clean milled post production wastes could be recycled after mixing with fresh plastics. The amount of milled plastic added to natural plastic is controlled depending on final product quality requirements, it may reach up to 50 %. Final product properties depend rather more on quality of recycled or milled polyamide than on its share. Attention shall be paid not to use milled scraps having more than 0.2 % water.

PACKAGING

1) PET/ALU/PE bags with/without a degassing valve. The bags are stacked on a pallet with the following stretch-foiling. Bag weight: 25 kg net. Pallet weight: 1000 kg. Quantity to be loaded in a truck (82m³) and 40'' marine container: 20000 kg net (20 pallets).

2) Polyethylene bags with a valve. The valve is sealed with scotch film. The bags are stacked on a pallet with the following stretch-foiling. Bag weight: 30 kg net. Pallet weight: 960 kg / Bag weight: 25 kg net. Pallet weight: 1000 kg. Quantity to be loaded in a truck (82m³) and 40'' marine container: 20160 kg net (21 pallets) / 20000 kg net (20 pallets).

Data given are average values and should not be used for specification purpose.
In order to check the availability of products please contact our sales office.

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