



**GRODNO KHMIVOLOKNO**  
JOINT STOCK COMPANY  
**GRODNAMID**

**GRODNAMID PA6-H-GF15P, GRODNAMID PA6-GF15P-1**

	Test method	Unit	Value
<b>RHEOLOGICAL PROPERTIES</b>			
<b>Melt Flow Rate</b> (270°C, 2,16 kg load)	ISO 1133	g/10 min	20 – 30
<b>Molding shrinkage</b> (60×60×2 mm)	ISO 294-4	%	0,6 – 0,9
<b>MECHANICAL PROPERTIES</b>			
<b>Tensile strength</b> (5 mm/min)	ISO 527	MPa	105
<b>Elongation at break</b> (5 mm/min)	ISO 527	%	4 – 6
<b>Tensile modulus</b> (1 mm/min)	ISO 527	MPa	5000
<b>Flexural stress</b> (2 mm/min)	ISO 178	MPa	175
<b>Flexural modulus</b> (2 mm/min)	ISO 178	MPa	5500
<b>Charpy impact strength</b> (+23°C)	ISO 179/1eU	kJ/m <sup>2</sup>	50
<b>Charpy impact strength</b> (– 30 °C)	ISO 179/1eU	kJ/m <sup>2</sup>	–
<b>Charpy notched impact strength</b> (+23°C)	ISO 179/1eA	kJ/m <sup>2</sup>	9
<b>Charpy notched impact strength</b> (– 30°C)	ISO 179/1eA	kJ/m <sup>2</sup>	–
<b>THERMAL PROPERTIES</b>			
<b>Melting point</b> (10 °C/ min)	ISO 3146	°C	217
<b>Temp. of deflection under load</b>			
0.45 MPa	ISO 75-1/-2	°C	180 – 190
1.80 MPa			170 – 180
<b>Vicat softening point</b> (50 °C/ h)	ISO 306	°C	–
<b>ELECTRICAL PROPERTIES</b>			
<b>Volume resistivity</b>	IEC 60093	Ohm×m	10 <sup>12</sup>
<b>Surface resistivity</b>	IEC 60093	Ohm	10 <sup>12</sup>
<b>Comparative tracking index</b>	IEC 60112		–
<b>OTHER PROPERTIES</b>			
<b>Water absorption, %</b>			
24h/23°C	Sim. to ISO 62	%	1.8
30 min at boiling			2.0
<b>Moisture absorption from air</b>	Sim. to ISO 62	%	2.4
<b>Density</b>	ISO 1183	g/cm <sup>3</sup>	1.22



## **GRODNAMID PA6-H-GF15P, GRODNAMID PA6-GF15P-1**

### **CHARACTERISTICS**

Glass fiber reinforced virgin polyamide 6 injection molding compounds. The materials have lower coefficient of friction, excellent processability, and decreased wear of the equipment parts. Grade «Grodnamid PA6-H-GF15P» is heat stabilized.

### **APPLICATION**

For automotive industry – gears, teeth wheels, bearing cages and other parts. The materials are 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 80 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 (82m<sup>3</sup>) 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 (82m<sup>3</sup>) 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.

SALES OFFICE  
fax.+375 (152) 54-21-94  
tel. +375 (152) 54-21-94  
e-mail: ppm@grodno-khim.by  
TECHNICAL SERVICE  
tel. +375 (152) 51-39-58

