



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

## GRODNAMID PA6-LP-211 SW

	Test method	Unit	Value
<b>RHEOLOGICAL PROPERTIES</b>			
<b>Melt Flow Rate</b> (230°C, 2,16 kg load)	ISO 1133	g/10 min	17 – 21
(270°C, 2,16 kg load)			55 – 65
<b>Molding shrinkage</b> (60×60×2 mm)	ISO 294-4	%	1.2 – 2.0
<b>MECHANICAL PROPERTIES</b>			
<b>Tensile strength</b> (20 mm/min)	ISO 527	MPa	73
<b>Elongation at break</b> (20 mm/min)	ISO 527	%	95
<b>Tensile modulus</b> (1 mm/min)	ISO 527	MPa	2600
<b>Flexural stress</b> (2 mm/min)*	ISO 178	MPa	75
<b>Flexural modulus</b> (2 mm/min)	ISO 178	MPa	2200
<b>Charpy impact strength</b> (+23°C)	ISO 179/1eU	kJ/m <sup>2</sup>	n. b.
<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	120 – 130
1.80 MPa			45 – 50
<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>13</sup>
<b>Surface resistivity</b>	IEC 60093	Ohm	10 <sup>13</sup>
<b>Comparative tracking index</b>	IEC 60112		–
<b>OTHER PROPERTIES</b>			
<b>Water absorption, %</b>			
24h/23°C	Sim. to ISO 62	%	2.3
30 min at boiling			2.5
<b>Moisture absorption from air</b>	Sim. to ISO 62	%	2.5
<b>Density</b>	ISO 1183	g/cm <sup>3</sup>	1.13

\* – deflection equal to 1.5 times the thickness of the test specimen

n. b. – no break



## CHARACTERISTICS

External lubricated, easy flowing injection molding grade for fast processing based on virgin PA6.

## APPLICATION

Used for injection molding of different parts in automotive, mechanical engineering, instrument-making, where fast processing is required, including production of thin-walled parts.

## 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

By customer's request it can be manufactured 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.

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