

### PA6 Gebamide B GF 30

Designation according to ISO 1043 >PA6 GF30 (REC70)<

#### Properties

Recyclate-based PA6-GF injection molding grade - Heat stabilized, high strength and rigidity, good toughness, excellent chemical resistance, especially to oils and fuels

#### Applications:

Technical injection molded parts in automotive and mechanical engineering, electrical insulation parts, intake pipes, charge air distributors, housings

Features <sup>1)2)</sup>	Test Condition	Unit	Standard	Value
<b>Mechanical properties</b>				
Charpy impact resistance	23 °C	kJ/m <sup>2</sup>	ISO 179/1eU	60
Charpy notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179/1eU	10
Tensile modulus	1 mm/min	Mpa	ISO 527-1	7.500
Yield stress	50mm/min	Mpa	ISO 527-1	150
Stretch elongation	50mm/min	%	ISO 527-1	3
Pull modulus of elasticity	1 mm/min	Mpa	ISO 178	7.300
<b>Thermal Properties</b>				
Vicat Softening Temperature	VST B50	°C	ISO 306 B50	> 200
Heat deflection HDT	1,8 MPa	°C	ISO 75-2	> 200
<b>Test Specimen Production Operations</b>				
Injection molding melt temperature		°C	ISO 294	270
Injection molding mold temperature		°C	ISO 294	80
<b>Other characteristics</b>				
Density	23°C	g/cm <sup>3</sup>	ISO 1183-1-A	1,36
Burning behaviour	2 mm	mm/min	FMVSS 302	< 100
Burning behaviour	1,6 mm	-	IEC 60695-11-10 (UL94)	HB
Shrinkage <sup>3)</sup>		%	ISO 294-4	0,25 -0,7
Water absorption	23°C; 50 % r.F.	%	ISO 62	2,1

1) Typical values for uncolored products. Deviations within normal tolerances are possible.

2) Guideline values for material comparison - not the basis for component and tool design

3) Shrinkage depends on the process control as well as the component and tool design

4) Own measurement according to UL94

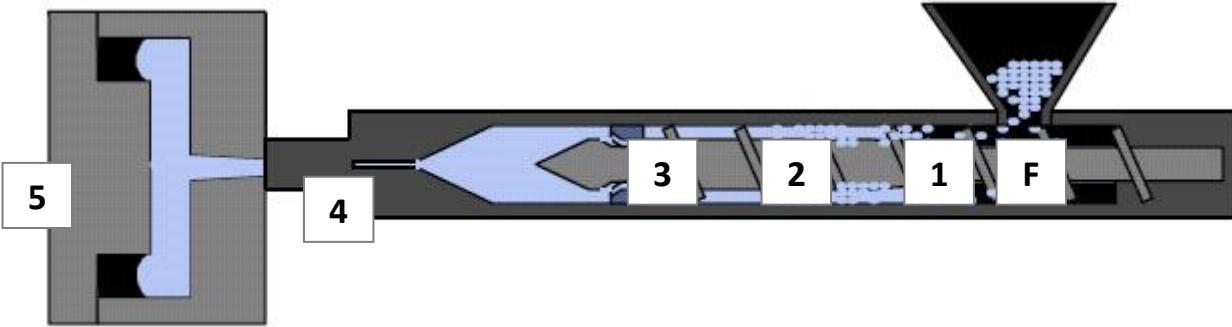
# Processing recommendations drying

## Conditions

Recommended drying temperatures and times	
Drying temperature (dry air dryer)	80 °C
Drying	3 - 5 h
Max. residual moisture	0,02 %

For downtimes of 4 hours or more, we recommend lowering the temperature of the dryer by 40°C

## Processing temperatures



Melt temperatur: 250 – 290 °C					
5. Mold	4. Nozzle	3. Zone	2. Zone	1. Zone	Feeding zone
70 - 100 °C	260 - 290 °C	260 - 280 °C	250 - 270°C	250 - 270 °C	60 – 80 °C

The values given are based on experience and are to be understood as guideline values.

**Test values**  
 Unless expressly stated otherwise, the stated values have been determined on standardized test specimens at room temperature. The data are to be regarded as indicative values, but not as mandatory minimum values. Please note that the properties may be significantly influenced by the tool design, the processing conditions and the coloring.

**Processing instructions**  
 Small quantities of fission products may be released during processing under the recommended processing conditions. According to the safety data sheet, compliance with the specified occupational exposure limits must be ensured by sufficient extraction and ventilation at the workplace so as not to impair the health and well-being of the machine operators. The prescribed processing temperatures must not be significantly exceeded in order to avoid greater partial decomposition of the polymer and separation of volatile decomposition products. Please note that all processing data given is for guidance only and may vary depending on individual processing units. Please contact your sales or technical representative for details.

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