



novalca

NOVAMIDE PA6 GF50 H2

**PA6 compound,
Glass fiber reinforced grade**

GF50: 50% glass fiber reinforced

H2: enhanced heat aging stabilization grade.

Color: available in black and in a limited color range on demand - for injection molding of high stiffness and high dimensional stability technical parts (industrial articles, electrical and automotive parts).

RECOMMENDED PROCESSING PARAMETERS FOR INJECTION MOLDING

DRYING CONDITIONS (dry air dryer)	BARREL TEMPERATURE	MOULD TEMPERATURE
Drying time is depending on moisture content, in general 2 ÷ 6 h at 80°C is sufficient. Recommended moisture levels after drying: 0.02 ÷ 0.05%	270 ÷ 290 °C	80 ÷ 120 °C
SHRINKAGE: Shrinkage is affected by the geometry and the wall thickness of the molded part by the position and size of the gate and by the processing parameters (melt and mold temperature, holding pressure and holding pressure time together with the storage time and storage temperature). The interaction of these various factors makes it difficult to predict the shrinkage of a part exactly. In addition glass-fiber reinforced products show a significant difference in the shrinkage perpendicular and parallel to the flow direction. It must be considered the post-shrinkage component too, giving rise to a dimensional change over the time.		
PACKAGING		
25 Kg Bags, 1000 Kg Octabins, 750 Kg Boxes		

PROPERTIES	METHOD		CONDITION	UNIT	TYPICAL VALUES
PHYSICAL					
Density	ASTM D792	ISO 1183	Dry	gr/cm ³	1.56
Humidity Absorption (equilibrium value, in air, +23°C, 50% RH)	INTERNAL METHOD		-	%	1.3 ÷ 1.6
Reinforcing filler	INTERNAL METHOD		-	%	50
MECHANICAL					
Tensile strength: stress at break	ASTM D638	ISO 527-1,-2	Dry	MPa	200
strain at break	ASTM D638	ISO 527-1,-2	Dry	%	2.7
Flexural modulus	ASTM D790	ISO 178	Dry	MPa	15500
IZOD notched impact strength, at 23 °C	ASTM D256	-	Dry	J/m	140
Specimen dimensions 62.5 mm x 12.7 mm x 3.2 mm					
THERMAL					
Melting point DSC, component PA6	ISO 11357		Dry	°C	PA6 215 ÷ 225
ELECTRICAL					
Surface resistivity	ASTM D257	IEC 60093	Dry	Ohm	1E13
Dielectric strenght – at 1 mm	ASTM D149	IEC 60243-1	Dry	KV/mm	38
Dielectric constant at 10 ⁶ Hz	ASTM D150	IEC 60250	Dry	-	3.8
Dissipation factor -10 ⁶ Hz	ASTM D150	IEC 60250	Dry	-	0.016
FLAMMABILITY					
Flammability UL 94 (thickness 1.6 mm)	UL 94		Dry	Class	HB
Burning rate FMVSS302 (thickness 2.2/ 3.2 mm)	ISO 3795		Dry	mm/min	passed

Our technical data are provided for guidance purpose only and are based on average values. The data are not meant to be used for specification or warranted purposes. Values may be affected by the design of the mold/die, the processing conditions and coloring/pigmentation of the product. Unless specified to the contrary, the data have been established on standardized test specimens at room temperature. All technical information is subject to continuous update, so the customer shall always ensure that the latest release of technical information is at his own disposal. It is the customer's responsibility to inspect and test our products in order to determine to his own satisfaction whether they are suitable for his intended uses and applications or used in conjunction with third-party materials. Unless specifically stated with reference to the specific color code, the products mentioned herein are not suitable for applications in the pharmaceutical, medical, dental and toys sectors, in contact with foodstuff or for potable water transportation.

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