



novalca

NOVAMIDE PA66 GF50 H2

**PA66 compound,
Glass fiber reinforced grade**

GF50: 50% glass fiber reinforced

H2: improved heat aging stabilization grade

Color: available in black and in a limited number of other colors on demand - for injection molding of technical parts with very high rigidity and dimensional stability (industrial articles, machinery components).

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%	280 ÷ 310 °C Standard melt temperature: 300 °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		-	%	1.0 ÷ 1.4
Reinforcing filler	INTERNAL METHOD		-	%	50
MECHANICAL					
Tensile strength: stress at break	ASTM D638	ISO 527-1,-2	Dry	MPa	220
strain at break	ASTM D638	ISO 527-1,-2	Dry	%	2.5
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 PA66	ISO 11357		Dry	°C	PA66 255 ÷ 265
ELECTRICAL					
Surface resistivity	ASTM D257	IEC 60093	Dry	Ohm	1E12
Dielectric strenght – at 1 mm	ASTM D149	IEC 60243-1	Dry	KV/mm	40
Dielectric constant at 10 ⁶ Hz	ASTM D150	IEC 60250	Dry	-	4.0
Dissipation factor -10 ⁶ Hz	ASTM D150	IEC 60250	Dry	-	0.015
Comparative tracking index (solution A, CTI)	VDE 0303-P1	IEC 60112	Dry	V	550
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.

Updating: January 2025 Printing date: 19 December 2025