



TEKAMID™ TB120G45

■ Features

TB120G45 is GF 45% reinforced Polyamide6. TB120G45 has good properties with chemical stability and good mechanical properties.

■ Application

Various parts

■ Drying

Product is dried and packed with a moisture content of $\leq 0.16\%$. Should the Packaging become damaged or be left open too long, then the material must be Dried. A too high moisture content can lead to a reduction of optical and Mechanical properties.

■ Molding Guideline

		Unit	Setting
Drying Temp.		°C	80 ~ 100
Drying Time		hr	4 ~ 5
Cylinder Temp.	Rear	°C	250 ~ 270
	Middle	°C	260 ~ 285
	Front	°C	260 ~ 290
Nozzle Temp.		°C	260 ~ 290
Resin Temp.		°C	260 ~ 290
Mold Temp.		°C	80 ~ 100
Injection Speed		%	40 ~ 70
Injection Pressure	1 st Pressure	%	20 ~ 50
	2 nd Pressure	%	20 ~ 50
	Back Pressure	%	0 ~ 20

■ Handling and safety

Detailed information can be obtained from the “Material Safety Data Sheet”(MSDS)
Which can be requested with every material order.



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Mechanical Properties

	Test condition	Test Method	Unit	TB120G45
Tensile Strength at Break	5mm/min	ASTM D638	kgf/cm ²	1,950
Elongation at Break	5mm/min	ASTM D638	%	2.0
Flexural Strength	3mm/min	ASTM D790	kgf/cm ²	2,700
Flexural Modulus	3mm/min	ASTM D790	kgf/cm ²	110,000
Notch Izod Impact	23°C(1/8")	ASTM D256	kgf-cm/cm	18.0
Strength	-30°C(1/8")	ASTM D256	kgf-cm/cm	-
Rockwell Hardness	R-Scale	ASTM D785	-	-

Thermal Properties

Heat Deflection Temp.	4.6 kgf/cm ²	ASTM D648	°C	220
Heat Deflection Temp.	18.6 kgf/cm ²	ASTM D648	°C	215
Melting Point	DSC	ASTM D3418	°C	220
Flammability		UL94	-	HB

Electrical Properties

Volume Resistance		ASTM D257	Ohm-cm	-
Dielectric Constant(10 ⁶)Hz		ASTM D150	-	-
Dielectric Strength		ASTM D149	KV/mm	-
Arc Resistance		ASTM D495	Sec	-

Physical Properties

Specific Gravity		ASTM D792	-	1.50
Water Absorption	23°C, 24hr	ASTM D570	%	0.9
Melt Flow Index		ASTM D1238	g/10min	-
Shrinkage		ASTM D955	%	0.2~0.7

Test condition : Dry as Molded

These values are for these specific compositions only. Addition of any kind may alter some or all of these properties. The data listed here fall within the normal range of product properties but they should not be used to establish specification limits nor used alone as the basis of design.

For further information on products, please contact customer service of MANDO Advanced Materials.