Product Information

PA66-C112 BK104

Toughened Modified Polyamide 66

FEATURES	APPLICATIONS
• Impact-modified	• Injection molding
• High strength	• Handles of power tools
• Good balance properties	• Household appliance's parts
• Good surface appearance	• Sports accessories

Properties[1]	Test Standard	Test Condition	S.I. Unit	S.I. Typical Value[1,2]
Mechanical				
Tensile Strength	ISO 527-2	10mm/min	MPa	45
Tensile Strain at Break	ISO 527-2	10mm/min	%	30
Flexural Strength	ISO 178	2mm/min	MPa	55
Flexural Modulus	ISO 178	2mm/min	MPa	1400
Izod Notched Impact Strength	ISO 180	23℃	kJ/m^2	80
Izod Unnotched Impact Strength	ISO 180	23℃	kJ/m^2	NB
Thermal				
Temperature of Deflection Under Load	ISO 75-2	0.45MPa（B）	℃	200
		1.80MPa（A）	℃	60
Electrical				
Volume Resistivity	IEC 60093	--	Ω·cm	10^{15}
Dielectric Strength	IEC 60243-1	--	kV/mm	--
Others				
Density	ISO 1183-1	--	g/cm^3	1.06
Ash	ISO 3451-1	--	%	--
Moisture Absorption	ISO 62	Equilibrium 23℃/50% r.h.	%	1.2-1.8
Melt Mass-flow Rate(MFR)	ISO 1133-1	--	g/10min	--
Molding Shrinkage	ISO 2577	Flow	%	1.7
		Transverse	%	1.9
Flammability	UL 94	--	/	HB

[1] These are typical values of the product's properties, and these values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes.
[2] The listed values are maybe different for pigmented material.

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Typical Processing Conditions

		Optimum	Range
Melt Temp.		275℃	270~290℃
Barrel Zone Temp.	Rear	265℃	260~275℃
	Center	275℃	270~290℃
	Front	285℃	280~300℃
Mold Temp.		80℃	70~100℃
Processing Temp. Upper Limit		320℃	
Injection Speed		Moderate to high	
Pre-dry Requirements		100~120℃, 4~6hr	

The parameter is just for referential purpose only. In actual processing, the parameter should be adjusted by construction of mold, shape and size of product, and so on.

SAFETY AND HANDLING CONSIDERATIONS

Material safety data sheets (MSDS) for resins are available from Kingfa Sci. & Tech. Co. Ltd. and its subsidiaries. MSDS sheets are provided to help customers satisfy their own handling, safety, disposal needs, and those that may be required by locally applicable health and safety regulations.

The following comments are general and applied only to resins as supplied. Various additives and processing aids used in fabrication and other materials used in finishing steps have their own safe use profile and must be investigated separately.

These resins have a very low degree of toxicity under normal conditions of use and should pose no unusual problems from ingestion, eye, or skin contact. However, caution is advised when handling, storing, using, or disposing of these resins. Good housekeeping and controlling of dusts are necessary for safe handling of product. Workers should be protected from the possibility of contact with molten resin during fabrication.

Handling and fabrication of plastic resins can result in the generation of vapors and dusts. Dusts resulting from sawing, filing, and sanding of plastic parts in post-molding operations may cause irritation to eyes and the upper respiratory tract. In dusty atmospheres, using an approved dust respirator is recommended

Good general ventilation of the polymer processing area is recommended. Processing may release fumes which may include polymer fragments and other decomposition products. Fumes can be irritating. At temperatures exceeding melt temperature, polymer fragments can occur. Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

Use chemical splash goggles if there is a potential for exposure to particles which could cause injury to the eye. Use gloves with insulation for thermal protection.

Color change of the product may be caused by UV exposure in general. So it is recommended that storage should keep in dry, cool place and avoid direct sunlight

We encourage customers and potential users of our products to review their applications for such products from the standpoint of human health and environmental quality. To help ensure that our products are not used in ways for which they were not intended or tested, our personnel will assist customers in dealing with ecological and product safety considerations. Your sales representative can arrange the proper contacts.

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