Product Information

# PA6-G30 HSBK017

## Glass Fiber Reinforced PA6

| FEATURES | APPLICATIONS |
|---|---|
| • High strength | • Injection molding |
| • High heat resistance | • Power tools |
| • Good surface appearance | • Household appliance's parts |
| • Good mechanical properties | • Mechanical 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 | 160 |
| Tensile Strain at Break | ISO 527-2 | 10mm/min | % | 3.0 |
| Flexural Strength | ISO 178 | 2mm/min | MPa | 210 |
| Flexural Modulus | ISO 178 | 2mm/min | MPa | 8000 |
| Izod Notched Impact Strength | ISO 180 | 23℃ | $kJ/m^2$ | 15 |
| Izod Unnotched Impact Strength | ISO 180 | 23℃ | $kJ/m^2$ | 75 |
| **Thermal** | | | | |
| Temperature of Deflection Under Load | ISO 75-2 | 0.45MPa（B） | ℃ | 220 |
| | | 1.80MPa（A） | ℃ | 205 |
| **Electrical** | | | | |
| Volume Resistivity | IEC 60093 | -- | Ω·cm | $10^{15}$ |
| Dielectric Strength | IEC 60243-1 | -- | kV/mm | -- |
| **Others** | | | | |
| Density | ISO 1183-1 | -- | $g/cm^3$ | 1.36 |
| Ash | ISO 3451-1 | -- | % | 30 |
| Viscosity number | ISO 307 | -- | ml/g | 155 |
| Moisture Absorption | ISO 62 | Equilibrium 23℃/50% r.h. | % | 1.8-2.3 |
| Molding Shrinkage | ISO 2577 | Flow | % | 0.3 |
| | | Transverse | % | 0.9 |
| 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. | | 265℃ | 250~275℃ |
| Barrel Zone Temp. | Rear | 260℃ | 250~285℃ |
| | Center | 265℃ | 260~290℃ |
| | Front | 270℃ | 265~295℃ |
| Mold Temp. | | 90℃ | 80~120℃ |
| Processing Temp. Upper Limit | | 315℃ | |
| Injection Speed | | Moderate to high | |
| Back Pressure | | -- | |
| Pre-dry Requirements | | 90~120℃, 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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