



技術資料表
Technical Data Sheet

KGRUTYPE

耐熱，結構剛性強化，高耐衝、耐低溫耐寒-30~-40°C，抗 UV 耐候，
寒帶區域戶外抗 UV 耐候產品用途

Heat resistant, reinforced structural rigidity, high impact
resistance, low temperature resistance (-30~-40°C), UV resistant
and weather resistant, suitable for outdoor UV-resistant and
weather resistant products in cold regions

樹脂 Resin	PBT Polybutylene terephthalate
規格 Grade	KGRU53B-D4
來源 source	上禾伸企業 SHANG HE SHEN ENTERPRISE CO., Ltd.

描述 Description

- 15%玻纖添加，耐熱佳，結構剛性強化。

With 15% glass fiber added, it has excellent heat resistance and strengthens structural rigidity.

- 高耐衝、耐低溫耐寒-30~-40°C。

High impact resistance, low temperature resistance and cold resistance -30~-40°C.

- 抗 UV 耐候性佳，適合長期在戶外使用的產品，使用年限長。

It has excellent UV resistance and weather resistance, making it suitable for long-term outdoor use and with a long service life.

- 優異的電氣性能，耐熱老化性佳。耐油、耐化學、耐藥性佳。

Excellent electrical properties and good resistance to heat aging. Excellent resistance to oil, chemicals, and pharmaceuticals.

- 尺寸安定性、低吸濕性，耐水解。

It has dimensional stability, low moisture absorption, and is resistant to hydrolysis.

- 此規格適合在寒帶區域之戶外抗候產品，或是高低溫差大的環境產品，與相關機能的產品上。

This specification is suitable for outdoor weather-resistant products in cold regions, or products for environments with large temperature differences, and related functional products.

成型模式	射出成型
Forming mode	Injection Molding

特性 Properties

項目 Project	測試標準 Testing standards	單位 Unit	標準數值 Typical Value
填充劑含量 Filler Content		%	15
比重 Specific Gravity	ASTM D792	g/cm ³	1.33
流動指數 MFR,(MI) 260×2.16KG	ASTM D1238	g/10min	25
收縮率-平行 Mold Shrinkage MD	3 mm t	%	0.6
收縮率-垂直 ⊥ Mold Shrinkage TD			~1.2
耐燃性 Flammability	UL-94		HB
顏色 Color			natural color

機械特性 Mechanical properties

伸張降伏強度 Tensile Strength at Yield	ASTM D638	kg/ cm ²	580
伸張斷裂強度 Tensile Strength at Break			410
拉伸模數 Tensile Modulus			22500
斷裂伸張率 Tensile Elongation at Break		%	6.0
彎曲強度 Flexural Strength	ASTM D790	kg/ cm ²	800
彎曲模數 Flexural Modulus			24500
衝擊強度(缺口式)IZOD Impact (notched)	ASTM D256	23°C kg-cm/cm	19
		-30°C kg-cm/cm	8
硬度 Rockwell/Shore Hardness	ASTM D785/D2240	D	66

熱力特性 Heat properties

熱變型溫度 18.54kg/ cm ²	ASTM D648	°C	120
Heat distortion temperature H D T			
熱變型溫度 4.6kg/ cm ²			165
Heat distortion temperature H D T			

建議成型條件 Recommended molding conditions

烘乾溫度 Drying temp. °C	100~120	烘乾時間 Drying time H	3~4
進料區溫度 Feed zone temp. °C	205~225	壓縮區溫度 Compression zone temp. °C	210~230
計量區溫度 Metering zone temp. °C	215~235	噴嘴溫度 Nozzle temp. °C	210~240
模具溫度 Mold temp. °C	60~70	射出壓力 Injection pressure Kg/ cm ²	400~800

*雖然上述信息是出於善意並被認為是準確的，但我們不保證依賴此類信息取得令人滿意的結果，並且不承擔因使用此類信息而引起的任何損失或損害的全部責任。*以上數值係僅供選擇用途品級之參考。

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