



技術資料表
Technical Data Sheet

KGTYPE

30%GF 高剛性強化，高耐熱，熱安定、耐化學、抗藥性、耐磨、尺寸安定性、耐水解，高流動，符合 VW50136 規範，黑色規格

30% GF high rigidity reinforcement, high heat resistance, thermal stability, chemical resistance, drug resistance, wear resistance, dimensional stability, hydrolysis resistance, high flow, in line with VW50136 specifications, black specification

樹酯 Resin PBT Polybutylene terephthalate

規格 Grade KG56-A9 BK

來源 source 上禾伸企業

描述 Description

- 30%GF 剛性強化，高耐熱，良好的耐熱性和抗熱老化性、熱安定。
30% GF rigidity reinforcement, high heat resistance, good heat resistance and heat aging resistance, thermal stability.
- 優良的機械性與優異的耐磨性。
Excellent mechanical properties and excellent wear resistance.
- 優異的電氣性能，高溫或潮濕環境中具有卓越的電氣絕緣性。
Excellent electrical properties, with excellent electrical insulation in high temperature or humid environments.
- 耐油及耐化學性、耐藥性佳。對燃料、油、脂肪和許多溶劑具有高耐受性。
Good oil resistance, chemical resistance and drug resistance. High resistance to fuels, oils, fats and many solvents.
- 尺寸安定性、低吸濕性。
Dimensional stability, low hygroscopicity.
- 優良的成型性，結晶速度快，成型性優異，高流動性，適合用於薄壁、大尺寸成品。
Excellent formability, fast crystallization speed, excellent formability, high fluidity, suitable for thin-walled and large-size finished products.
- 耐水解性高，耐候性佳。
High hydrolysis resistance and good weather resistance.
- 符合 ROHS、REACH 法規。
Complies with ROHS and REACH regulations.
- 符合大眾汽車 VW50136 規範。
Complies with Volkswagen VW 50136 standard.

應用 Description

適用於新能源產業、電子連接器 (connector)、繼電器、開關、配電箱、光纖電纜護套、照明零組件，海上船舶零組件，汽車用零件符合車用規範，醫療檢驗、滅菌及電機相關應用等等。

Suitable for new energy industries, electronic connectors, relays, switches, distribution boxes, fiber optic cable sheaths, lighting components, marine components, automotive parts, medical testing, sterilization and motor-related applications, etc.

成型模式

Forming mode

射出成型

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		%	30
比重 Specific Gravity	ASTM D792	g/cm ³	1.51
流動指數 MFR,(MI) 260×2.16KG	ASTM D1238	g/10min	45
收縮率-平行 Mold Shrinkage MD	3 mm t	%	0.3
收縮率-垂直 ⊥ Mold Shrinkage TD			~0.8
耐燃性 Flammability	UL-94		HB
顏色 Color			Black color

機械特性 Mechanical properties

伸張降伏強度 Tensile Strength at Yield			1330
伸張斷裂強度 Tensile Strength at Break	ASTM D638	kg/ cm ²	1060
拉伸模數 Tensile Modulus			51000
斷裂伸張率 Tensile Elongation at Break			3.1
彎曲強度 Flexural Strength	ASTM D790	kg/ cm ²	2060
彎曲模數 Flexural Modulus			85000
衝擊強度(缺口式) IZOD Impact (notched)	ASTM D256	23°C kg-cm/cm	8.0
硬度 Rockwell/Shore Hardness	ASTM D785/D2240	D	78

熱力特性 Heat properties

熱變型溫度 18.54kg/ cm ²			205
Heat distortion temperature H D T	ASTM D648	°C	210
熱變型溫度 4.6kg/ cm ²			222
Heat distortion temperature H D T	DSC		222
熔融溫度 Melting temperature			

電氣特性 Electrical properties

體積固有阻抗 Volume inherent impedance	ASTM D257	Ω-cm	10 ¹⁵
表面阻抗 Surface resistivity		Ω	10 ¹³

成型條件 **Molding conditions**

烘乾溫度 Drying temp. °C	100~120	烘乾時間 Drying time H	4
進料區溫度 Feed zone temp. °C	240~255	壓縮區溫度 Compression zone temp. °C	245~260
計量區溫度 Metering zone temp. °C	255~270	噴嘴溫度 Nozzle temp. °C	245~275
模具溫度 Mold temp. °C	60~90	射出壓力 Injection pressure Kg/ cm ²	450~850

*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。

Although the above information is made in good faith and is believed to be accurate, we do not guarantee reliance on such information to obtain satisfactory results, and we do not assume full responsibility for any loss or damage caused by the use of such information. The above values are for reference only for the selected grade.