



## 技術資料表 Technical Data Sheet

### **BKTYPE**

PC/PBT 合金，超高耐衝、耐低溫耐寒，高效能抗 UV 級

PC/PBT alloy, ultra-high impact resistance, low temperature resistance and cold resistance, high performance and UV resistance

樹脂 Resin PC/PBT PC/PBT alloy

規格 Grade BK75-A1

來源 source 上禾伸企業

#### 描述 Description

PC/PBT 合金塑料，是 PC 聚碳酸酯塑料和 PBT 聚對苯二甲酸丁二醇酯塑料之合金塑料。PC 聚碳酸酯塑料具有抗衝擊性能、韌性和耐熱性能。PBT 聚對苯二甲酸丁二醇酯塑料，則提供抗化學性。

結晶 PBT 聚對苯二甲酸丁二醇酯塑料通常對濕度敏感，但因在混合物中有 PC 而得到改善。PC/PBT 合金適用於需要抗衝擊和抗化學作用以及耐低溫衝擊性。

PC/PBT 合金塑料，可以承受很寬的溫度範圍而不變形或失去其機械性能，使其適合在惡劣的環境中使用。

PC/PBT 合金塑料，是一種出色的聚合混合物，匯集了其塑料的最佳性能。其高衝擊強度、耐化學性、熱穩定性和優異的電氣性能使其成為汽車、電氣、醫療和消費性電子等眾多行業的通用材料。

PC/PBT 合金塑料的生產工藝還可以創建複雜的形狀和高品質的飾面，進一步擴展了其適用性。

polycarbonate plastic has impact resistance, toughness and heat resistance. PBT polybutylene terephthalate plastic provides chemical resistance. Crystalline PBT polybutylene terephthalate plastic is usually sensitive to moisture, but this is improved by having PC in the mix. PC/PBT alloy is suitable for applications requiring impact and chemical resistance as well as low temperature impact resistance.

PC/PBT alloy plastic can withstand a wide temperature range without deforming or losing its mechanical properties, making it suitable for use in harsh environments.

PC/PBT alloy plastic is an excellent polymer mixture that brings together the best properties of its plastics. Its high impact strength, chemical resistance, thermal stability and excellent electrical properties make it a versatile material in many industries including automotive, electrical, medical and consumer electronics.

The PC/PBT alloy plastic production process can also create complex shapes and high-quality finishes, further extending its applicability.

■PC/PBT 合金塑料，常溫超高耐衝擊，亦耐低溫高耐寒。

PC/PBT alloy plastic, ultra-high impact resistance at normal temperature, low temperature and cold resistance.

■PC/PBT 合金塑料，不易發生如 PC 塑料之應力開裂，導致產品發生裂痕，甚至斷裂。

PC/PBT alloy plastic is not prone to stress cracking like PC plastic, causing cracks or even breakage of the product.

■PC/PBT 合金塑料，良好的耐化學品耐藥性能，可延長由該塑料製成的產品的使用壽命。

PC/PBT alloy plastic has good chemical resistance and can extend the service life of products made of this plastic.

■PC/PBT 合金塑料，可以塗佈加工，低吸濕性能。

PC/PBT alloy plastic, can be coated and processed, and has low moisture absorption properties.



**成型模式**

射出成型

**Forming mode**

Injection Molding

**特性 Properties**

項目 Project	單位 Unit	測試標準 Testing standards	標準數值 Typical Value
填充劑含量 Filler Content	%		**
比重 Specific Gravity	g/cm <sup>3</sup>	ASTM D792	1.22
流動指數 MFR,(MI) 250°C×5KG	g/10min	ASTM D1238	25
流動指數 MFR,(MI) 240°C×5KG			**
收縮率-平行    Mold Shrinkage MD	%	3 mm t	0.8
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			550
伸張斷裂強度 Tensile Strength at Break	kg/ cm <sup>2</sup>	ASTM D638	450
拉伸模數 Tensile Modulus			20500
斷裂伸張率 Tensile Elongation at Break	%		100
彎曲強度 Flexural Strength	kg/ cm <sup>2</sup>	ASTM D790	720
彎曲模數 Flexural Modulus			21000
衝擊強度(缺口式)I ZOD Impact (notched)	23°C kg-cm/cm	ASTM D256	100
硬度 Rockwell/Shore Hardness	D	D785	3

**熱力特性 Heat properties**

熱變型溫度 4.6kg/ cm <sup>2</sup> H D T	°C	D648	135
熱變型溫度 18.54kg/ cm <sup>2</sup> H D T			108

**成型條件 Molding conditions**

烘乾溫度 Drying temp. °C	90~100	烘乾時間 Drying time H	4~6
進料區溫度 Feed zone temp. °C	255~265	壓縮區溫度 Compression zone temp. °C	255~275
計量區溫度 Metering zone temp. °C	265~280	噴嘴溫度 Nozzle temp. °C	265~280
模具溫度 Mold temp. °C	65~90	射出壓力 Injection pressure Kg/ cm <sup>2</sup>	600~1000

\*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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