



技術資料表 Technical Data Sheet

BWTYPE

PC/TPEE 合金，具高彈性與抗曲折彎曲、高耐衝擊性，低溫下動態使用保持穩定性能，耐油、耐溶劑，潤滑耐磨。

PC/TPEE alloy has high elasticity and resistance to bending and flexing, high impact resistance, maintains stable performance under dynamic use at low temperatures, and is resistant to oil and solvents, lubrication and wear.

樹脂 Resin	PC/TPEE PC/TPEE alloy
規格 Grade	BW77-A1
來源 Source	上禾伸企業 SHANG HE SHEN ENTERPRISE CO., Ltd.

描述 Description

PC/TPEE 合金，它結合了 PC 塑料的高強度、剛性與耐熱性，以及 TPEE 塑料的優異彈性、低溫韌性與耐衝擊性，能改善傳統 PC 塑料耐寒性差及缺口敏感的缺點。

PC/TPEE alloy combines the high strength, rigidity, and heat resistance of PC plastic with the excellent elasticity, low-temperature toughness, and impact resistance of TPEE plastic, thus improving the shortcomings of traditional PC plastic such as poor cold resistance and notch sensitivity.

■耐疲勞與抗變形，改善單一 PC 塑料容易應力開裂的弱點，具備良好的動態抗反覆彎折與耐蠕變表現。

It exhibits fatigue resistance and deformation resistance, improving upon the weakness of single PC plastics being prone to stress cracking, and possesses excellent dynamic resistance to repeated bending and creep resistance.

■高剛性與韌性平衡，結合 PC 塑料的剛度與彈性體的抗衝擊能力，在低溫環境下仍能維持極佳的韌性。

It balances high rigidity and toughness, combining the rigidity of PC plastic with the impact resistance of elastomers, and can maintain excellent toughness even at low temperatures.

■可耐摔、抗震動疲勞性佳，可承受動態負載，提高 PC 塑料的耐磨性，抗化學性增強，對油性、碳氫化合物有明顯抵抗性。

It is drop-resistant, has good vibration fatigue resistance, can withstand dynamic loads, improves the wear resistance of PC plastic, enhances chemical resistance, and has significant resistance to oils and hydrocarbons.

■加工性佳，提升熔融 Mi 流動性，便於注塑成型複雜結構零件。

It has excellent processability, improves the fluidity of molten Mi, and facilitates injection molding of complex structural parts.

應用 Application

電子電器：耐衝擊的結構外殼與活動卡扣。

Electronic and electrical appliances: impact-resistant structural housing and movable clips.

汽車工業：用於需要耐撞擊、耐低溫及結構強度的內外裝扣件或保險桿組件。

Automotive industry: Used for interior and exterior fasteners or bumper assemblies that require impact resistance, low-temperature resistance, and structural strength.

工業零件：需承受反覆彎曲疲勞與機械應力的傳動或彈性組件。

Industrial parts: Transmission or elastic components that need to withstand repeated bending fatigue and mechanical stress.

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
比重 Specific Gravity	ASTM D792	g/cm ³	1.17
流動指數 MFR,(MI) 250×2.16KG	ASTM D1238	g/10min	10
收縮率-平行 Mold Shrinkage MD	3 mm t	%	0.6
收縮率-垂直 ⊥ Mold Shrinkage TD			~1.0
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	600
伸張斷裂強度 Tensile Strength at Break			500
拉伸模數 Tensile Modulus			22000
斷裂伸張率 Tensile Elongation at Break		%	8
彎曲強度 Flexural Strength	ASTM D790	kg/ cm ²	900
彎曲模數 Flexural Modulus			24000
衝擊強度(缺口式) IZOD Impact (notched)	ASTM D256	23°C kg-cm/cm	85
硬度 Rockwell/Shore Hardness	ASTM D785/D2240	D	74

熱力特性 Heat properties

熱變型溫度 18.54kg/ cm ²	ASTM D648	°C	65
Heat distortion temperature H D T			
熱變型溫度 4.6kg/ cm ²			95
Heat distortion temperature H D T			

建議成型條件 Recommended molding conditions

烘乾溫度 Drying temp. °C	100	烘乾時間 Drying time H	4
進料區溫度 Feed zone temp. °C	230~250	壓縮區溫度 Compression zone temp. °C	235~255
計量區溫度 Metering zone temp. °C	235~260	噴嘴溫度 Nozzle temp. °C	240~265
模具溫度 Mold temp. °C	60~100	射出壓力 Injection pressure Kg/ cm ²	500~800

*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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