



技術資料表 Technical Data Sheet

BEHVTYPE

PC/PA66 合金，高韌性，耐油、耐溶劑，尺寸安定，潤滑耐磨、耐熱性，結晶成型快速

PC/PA66 alloy: high toughness, oil and solvent resistance, dimensional stability, lubrication, wear resistance, heat resistance, and rapid crystallization.

樹脂 Resin	PC/PA66 PC/PA66 alloy
規格 Grade	BEHV77-A3
來源 Source	上禾伸企業 SHANG HE SHEN ENTERPRISE CO., Ltd.

描述 Description

PC/PA66 合金，結合了 PC 塑料與 PA66 塑料的優異、卓越特性，如低溫衝擊強度、良好的加工性及耐熱性。通常用於汽車結構件、電氣開關與機械零件，實現兼具高韌性與耐用性的工程塑料需求。

PC/PA66 alloys combine the excellent properties of PC and PA66 plastics, such as low-temperature impact strength, good processability, and heat resistance. They are commonly used in automotive structural components, electrical switches, and mechanical parts to meet the demands of engineering plastics that offer both high toughness and durability.

■優異的綜合機械性能：兼具 PC 的硬度與 PA66 的韌性，與耐衝擊性高。

Excellent overall mechanical properties: It combines the hardness of PC with the toughness of PA66, and has high impact resistance.

■出色的耐化學性：PA66 塑料顯著改善了純 PC 塑料不耐油、不耐溶劑的缺點。

Excellent chemical resistance: PA66 plastic significantly improves upon the shortcomings of pure PC plastic, such as poor oil and solvent resistance.

■高尺寸穩定性與耐磨性：克服了 PA66 塑料吸水導致尺寸不穩定的問題，並保持了良好的潤滑耐磨特性。

High dimensional stability and wear resistance: It overcomes the problem of dimensional instability caused by water absorption in PA66 plastic, and maintains good lubrication and wear resistance properties.

■良好耐熱性與阻燃性：耐熱穩定性佳，結合 PA66 塑料的自熄性，適用於要求高溫的電氣零件。

Good heat resistance and flame retardancy: Excellent heat resistance and stability, combined with the self-extinguishing properties of PA66 plastic, make it suitable for electrical parts requiring high temperatures.

■加工性佳：結合了 PA66 塑料的流動性，快速結晶性，縮短成型週期。

Excellent processability: It combines the fluidity and rapid crystallization of PA66 plastic, shortening the molding cycle.

應用 Application

汽車工業：引擎室部件、齒輪、軸承、連接件等。

Automotive industry: Engine compartment components, gears, bearings, connectors, etc.

電子電氣：斷路器、開關、線圈骨架、插座。

Electrical and electronic equipment: circuit breakers, switches, coil frames, sockets.

工業機械：滑輪、葉輪、結構支架。

Industrial machinery: pulleys, impellers, structural supports.

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		%	**
比重 Specific Gravity	ASTM D792	g/cm ³	1.14
流動指數 MFR,(MI) 275×2.16KG	ASTM D1238	g/10min	1.8
流動指數 MFR,(MI) 300×2.16KG			10
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			500
伸張斷裂強度 Tensile Strength at Break	ASTM D638	kg/ cm ²	378
拉伸模數 Tensile Modulus			19000
斷裂伸張率 Tensile Elongation at Break			10
彎曲強度 Flexural Strength	ASTM D790	kg/ cm ²	750
彎曲模數 Flexural Modulus			19300
衝擊強度(缺口式) IZOD Impact (notched)	ASTM D256	23°C kg-cm/cm	9
硬度 Rockwell/Shore Hardness	ASTM D785/D2240	D	75

熱力特性 Heat properties

熱變型溫度 18.54kg/ cm ²			111
Heat distortion temperature H D T	ASTM D648	°C	195
熱變型溫度 4.6kg/ cm ²			
Heat distortion temperature H D T			
熔融溫度 Melting temperature	DSC		> 230

電氣特性 Electrical properties

體積固有阻抗 Volume inherent impedance	ASTM D257	Ω·cm	10 ¹⁴
表面阻抗 Surface resistivity		Ω	10 ¹⁴



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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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