



技術資料表
Technical Data Sheet

FGTYPE

添加 30%GF 填充，高剛性強化，耐熱、低吸濕，抗低溫、耐候、耐磨
With 30% GF filler, it has high rigidity and reinforcement, is heat-resistant, has low moisture absorption, and is resistant to low temperatures, weathering, and abrasion

樹脂 Resin	PA12 Polyamide12
規格 Grade	FG56-B4 BK
來源 Source	上禾伸企業 SHANG HE SHEN ENTERPRISE CO., Ltd.

描述 Description

Nylon 12 (Polyamide 12, 尼龍 12) 為熱可塑性半結晶型塑膠。與其他熱可塑性塑膠相比，在強度、延展性、耐磨性及耐熱性上提供了卓越的平衡，並有很好的流動性及寬廣的加工成型範圍，使其成為最普遍被使用的工程塑膠之一。

Nylon 12 的吸濕性低於 Nylon 6/6、Nylon 6、Nylon 6/10，使其不同的環境濕度下可維持良好的尺寸安定性，並在低溫環境有卓越的韌性及耐衝擊性。

其他優點如耐化學性佳、低比重、高改質複合性。

Nylon 12 (Polyamide 12, Nylon 12) is a thermoplastic semi-crystalline plastic. Compared with other thermoplastic plastics, it provides an excellent balance of strength, ductility, wear resistance and heat resistance, and has good fluidity and a wide range of processing and molding, making it the most commonly used engineering One of the plastics.

The hygroscopicity of Nylon 12 is lower than that of Nylon 6/6, Nylon 6 and Nylon 6/10, so that it can maintain good dimensional stability under different environmental humidity, and has excellent toughness and impact resistance in low temperature environment.

Other advantages such as good chemical resistance, low specific gravity, high modified composite.

■ 玻纖添加 30% · 剛性強化 · 耐熱強化 · 耐磨。

30% glass fiber added, rigid, heat-resistant and wear-resistant.

■ 具有低吸濕性、尺寸穩定性、良好的抗低溫性、抗衝擊性。

It has low moisture absorption, dimensional stability, good low-temperature resistance, and impact resistance.

■ 良好的加工性、出色的耐候性。

Good processability and excellent weather resistance.

■ 對金屬有良好的附著力、黏合度。

It has good adhesion and bonding strength to metals.

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		%	30
比重 Specific Gravity	ASTM D792	g/cm ³	1.259
流動指數 MFR,(MI) 230×2.16KG	ASTM D1238	g/10min	2
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	%	0.3
收縮率-垂直 ⊥ Mold Shrinkage TD			~0.6
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			950
伸張斷裂強度 Tensile Strength at Break	ASTM D638	kg/ cm ²	750
拉伸模數 Tensile Modulus			38500
斷裂伸張率 Tensile Elongation at Break		%	4.5
彎曲強度 Flexural Strength	ASTM D790	kg/ cm ²	1450
彎曲模數 Flexural Modulus			46000
衝擊強度(缺口式)IZOD Impact (notched)	ASTM D256	23°C kg-cm/cm	19
硬度 Rockwell/Shore Hardness	ASTM D785/D2240	D	72

熱力特性 Heat properties

熱變型溫度 18.54kg/ cm ²			145
Heat distortion temperature H D T	ASTM D648	°C	160
熱變型溫度 4.6kg/ cm ²			
Heat distortion temperature H D T			

電氣特性 Electrical properties

體積固有阻抗 Volume inherent impedance	ASTM D257	Ω-cm	10 ¹³
表面阻抗 Surface resistivity		Ω	10 ¹⁴

塑料狀態 plastic state 乾燥 dry

建議成型條件 Recommended molding conditions

烘乾溫度 Drying temp. °C	80~100	烘乾時間 Drying time H	4
進料區溫度 Feed zone temp. °C	190~220	壓縮區溫度 Compression zone temp. °C	195~225
計量區溫度 Metering zone temp. °C	200~230	噴嘴溫度 Nozzle temp. °C	200~235
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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