



技術資料表 Technical Data Sheet

93WFITYPE

遠紅外線塑料

Far infrared plastic

樹脂 Resin TPV Thermoplastic vulcanizate

規格 Grade 93WF1475A-A9

來源 source 上禾伸企業

描述 Description

TPV 一種俱安定特性的 EPDM RC 單體與聚烯烴化合物迅速混摻合成，其機械性質可媲美已硫化的熱固性橡膠(EPDM)，能由傳統的射出機台或押出機台生產。

TPV is a kind of stable EPDM RC monomer and polyolefin compound which are rapidly blended and synthesized. Its mechanical properties are comparable to that of vulcanized thermoset rubber (EPDM). It can be produced by traditional injection machines or extrusion machines.

■耐化學性、耐候性佳，耐溫性在(約)-60~135°C。

Chemical resistance, good weather resistance, temperature resistance (about) -60 ~ 135 °C.

■低壓縮變形、彈性回覆力佳、止滑性佳、觸感佳。抗老化、耐疲勞性佳。

Low compression deformation, good elastic response, good slip, good touch. Anti-aging, good fatigue resistance.

■比重輕、易加工，硬範圍 Shore A35~50D、可直接射包 PP PE。

Light weight, easy processing, hard range Shore A35 ~ 50D, can be directly packet PP PE.

■可適用一般塑膠射出、押出成型，低耗能，可取代橡膠，且綠色環保可回收。

Can be applied to the general plastic injection, extrusion molding, low energy consumption, can replace the rubber, and green can be recycled.

遠紅外線為不可視光線的一種，波長在 4 微米 ~ 1000 微米之間，其中以 4 ~ 20 微米的範圍對人體最有益。遠紅外線的特性是能深入人體內部的組織，促進人體內細胞的水分子產生一種共振，賦予細胞生命力，加速血液循環，活化新陳代謝，增進組織再生的能力，活化免疫系統，並且能有效的抑制老化。

上禾伸企業有限公司利用 TPV 樹脂為基材，將植於遠紅外線陶瓷粉上，之生育光波來源貴金屬白金奈米化（粒徑小於 20nm），與樹脂結合成室溫下即可釋放出生育光波（4~14μm，接近人體釋放的 9.36μm 電磁波），可與人體產生共振效果，具有強力促進新陳代謝、活血健身的良好效果。適合用於保健、保溫及醫療等產品上。

Infrared is a kind of invisible light with wavelengths between 4 microns and 1000 microns, of which the range of 4 to 20 microns is the most beneficial to the human body. The characteristics of far infrared rays are that they can penetrate deep into the tissues of the human body, promote a resonance of water molecules in the cells of the human body, endow cells with vitality, accelerate blood circulation, activate metabolism, enhance the ability of tissue regeneration, activate the immune system, and can effectively inhibit aging.



Shang He Shen Enterprise Co., Ltd. uses TPV resin as the base material, which is planted on the far-infrared ceramic powder. The source of the growth light wave is the precious metal platinum nanometer (the particle size is less than 20nm), which can be combined with the resin to release the growth at room temperature. Light waves (4~14µm, close to the 9.36µm electromagnetic waves released by the human body) can resonate with the human body, and have the good effect of strongly promoting metabolism, promoting blood circulation and fitness. Suitable for use in health care, thermal insulation and medical products.

成型模式	射出成型	押出成型
Forming mode	Injection Molding	Extrusion Molding

應用 Applications

運動器材 Sports Equipment 醫療用品 Medical supplies 傢俱用品 Household items

特性 Properties

項目 Project	單位 Unit	測試標準 Testing standards	標準數值 Typical Value
硬度 Rockwell Hardness	Shore A	ASTM D-2240	76±3
比重 Specific Gravity	g/cm ³	ASTM D-792	1.01±0.03
流動指數 Melt Flow Index	g/10min 190°C×5KG	ASTM D-1238	15

機械特性 Mechanical properties

100%抗拉模數 Tensile Modulus	Kg/cm ²		25
拉伸強度 Tensile Strength	Kg/cm ²	ASTM D-412	54
伸長率 Elongation at Break	%		575
撕裂強度 Tear Strength	Kg/cm	ASTM D-624	26
壓縮永久變形 Compression permanent deformation	(100°C) %	ASTM D-395 Method B	33

其他屬性 Miscellaneous Properties

顏色 Color			Natural
形態 Product Form			Pellets
燃燒性 Flammability		UL 94	HB

成型條件 Molding conditions

烘乾溫度 Drying temp. °C	80	烘乾時間 Drying time H	3~4
進料區溫度 Feed zone temp. °C	175~200	壓縮區溫度 Compression zone temp. °C	180~200
計量區溫度 Metering zone temp. °C	180~205	噴嘴溫度 Nozzle temp. °C	190~210
模具溫度 Mold temp. °C	10~60	射出壓力 Injection pressure Kg/ cm ²	100~900

*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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