

一、PTFE 微孔薄膜简介 **Introduction to PTFE Microporous Membrane**

PTFE 微孔薄膜由高结晶度的 PTFE 分散料，经过挤压、纵向拉伸、横向拉伸，最终形成带有立体三维结构的薄膜。其孔径在 0.02~5μm 之间，薄膜厚度在 8~30μm，孔隙率在 80~97%之间。

PTFE micro-porous membrane is made up of high crystallinity PTFE fine powder and shaped into 3D structure through compressing, vertical and horizontal stretching. The membrane pore size is between 0.02~5 μ m, thickness is 8~30 μ m and porosity is between 80~97%.

金由 iTEX 高性能 PTFE 微孔薄膜特点

金由 iTEX 高性能 PTFE 微孔薄膜在生产之初，严格控制 PTFE 分散料品质。配合 18 年 PTFE 微孔薄膜的生产经验，在生产过程中，对于细节精益求精。加上多处“独到”的生产工艺，使金由 iTEX 高性能 PTFE 微孔薄膜具有高耐水压力、高透湿性、高机械强度等性能。

Features of Jinyou iTEX PTFE membrane

The PTFE fine powder is controlled strictly before to be used as approved material.

And thanks to our 18-year experience and unique technology in producing PTFE membrane, we have consistently improved the product in every detail.

Therefore, iTex membrane is featured by high water resistance, high breathability and high durability.

高耐水压力：在 20 次水洗以后，按美国 ASTM D751-2006 标准测定：C 型达 20,000mm 耐水压力。S 型可达 67,000mm 耐水压力，已达美国 MIL-DTL-31011B 水平（美国军方标准），特别适用于军、警、消防官兵服装。

High Water Resistance

According to ASTM D751-2006, water resistance for type C reaches 20,000mm H₂O and Type S reaches up to 67,000mm H₂O after 20 times washing, which meets the standard of US MIL-DTL-31011B. Therefore, it becomes ideal material to make uniforms for army, police and firefighting.

高透湿/透气性：洗涤前透湿量（汗液形成的水蒸气）按日本标准 JISL099B1 标准测试，C 型达 5000g/m²·24h 以上，S 型达 7500g/m²·24h 以上。

High breathability / Air Permeability

According to JISL099B1, the moisture breathability for Type C reaches over 5000g/m²·24h and Type S over 7500g/m²·24h before washing.

高耐用性：金由 iTEX 高性能 PTFE 微孔薄膜，由于在生产过程经过的特殊的处理，使其具有极好的防油污性能。即使多次洗涤剂水洗后，仍具有高耐水压优点。解决了目前中国国内市场上一一般 PTFE 面料，经水洗后耐水压急剧下降的难题，使用寿命大大延长。

High Durability

Jinyou iTEX PTFE membrane has excellent oil and stain repellence due to special treatment. It

also maintains high water resistance after being washed many times by detergent.

In contrast, water resistance from other companies' membrane garment in Chinese market still drops dramatically after being washed.

So Jinyou iTEX PTFE membrane can greatly extend the service life and be a leader in the market.

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二、金由 iTEX 高性能微孔薄膜复合织物性能指标

试验项目 Item 产品 Product	耐水压力 Water Pressure Resistance (mmH ₂ O)				透湿量◆ Breathability (g/m ² · 24h)
	初始☼ Initially	水洗 20 次后☼ After Wash	初始◆ Initially	水洗 20 次后◆ After wash	
一般 PTFE 膜 Other Membrane	~10,000	~3,000	~5,000	1,000	~5,000
iTEX -C	≥35,000	≥20,000	≥20,000	≥15,000	≥7,500
iTEX -S	≥75,000	≥63,000	≥63,000	≥50,000	≥5,500

☼依据 ASTM 0751-2006 美国标准; As per ASTM 0751-2006

◆依据 JISL 1092 日本标准; As per JISL 1092

◆依据 JISL 1099 测试 As per JISL 1099

三、金由 iTEX-S 型 PTFE 微孔薄膜复合织物与美国军用标准比较

Comparative data between Jinyou iTEX-S type and US Military Standards

类型 Type	耐水压 Water Pressure Resistance (mmH ₂ O)		透湿量 Breathability (g/(m ² · 24h))
	初始 Initially	水洗 20 次后 After Wash	
iTEX-S	≥75,000	≥63,000	7,500
美国军标 US Military	63,270	56,240	5,000

产品用途 Product Application

防火防护布料 Protective Clothing for firefighting

户外（防寒）服 Outdoor Clothing

在其他领域的应用 Other Products Application In Different Area

- PTFE scrim is being used in power station to secure 30,000 hours service life. Market share is over 50%.
- 100% PTFE felt with PTFE membrane is being used in incineration to secure 4 years service life and emission below 10mg/Nm³. Market share reaches up to 50%.
- iHEPA high efficient PSB filter paper is being used for HEPA filter and cartridge in China as the first choice.
- iGasket expanded Gasket will break the monopoly from an American company in Chinese market for 15 years.