

SOFTLINES

INTERACTIVE SOLUTIONS FOR FUNCTIONAL FABRICS AND GARMENTS

Where function meets fashion, we are there.



UNLEASH ACTIVEWEAR MARKET POTENTIAL LEVERAGING INTERTEK'S EXPERTISE AND SOLUTIONS

From everyday workout apparel to team sports uniforms, Intertek has the solutions and expertise you need to assure the function and performance of your active apparel.

Marketing claims assured

Whether you sell jackets for hiking or pants for yoga, our solutions offer assurances that your jackets are windproof or your yoga pants stretch and recover as advertised. Count on us to help you establish a trusted image of your brand and products in the competitive consumer market.

Performance qualified

With the absence of regulatory requirements for the majority of the functional claims, our experts can advise you on the different types of tests available to evaluate fabric for different purposes. We've been at the forefront of high performance fabric testing over the past decade, enabling Intertek to offer best-in-class recommendations and advice in this domain.

Innovation to power ahead

As fabric technology evolves in the industry, our expertise in high performance fabric research and development projects propels your speed to market, adding unique value to your brands and consumers. New to the athleisure market? You can partner with us on your product development.

TESTING FOR ALL PROPERTIES AND PERFORMANCE CLAIMS

COMFORT

Quick Dry

We take absorbency, wicking and drying rate performance into evaluation for quick-dry claims on two-way transportation fabric.

Breathability

Often tested together with waterproof and/or windproof properties, it measures how well the fabric transfers sweat from the human body into the air. The more breathable the fabric is, the more comfortable the wearer feels. We look into both Water Vapour Permeability (WVP) and Water Vapour Resistance (Ret) when determining breathability.

Moisture Management

Moisture Management Test (MMT) is specially designed for one-way transportation fabric to determine how good it is in carrying moisture away from skin to atmosphere.

Thermal Regulation

By measuring the degree of warmth or cooling generated by fabrics, we can evaluate the thermal claims as stated.

Stretch & Recovery

Stretch examines how elongated the fabric can be when force applied two-way (crosswise direction) or four-way (both crosswise and lengthwise direction) without breaking. Recovery defines that the fabric can go back to its original dimension after stretching.

HEALTH & BEAUTY

Anti-aging

The test aims at measuring how effective the fabric is in removing free radicals, which are major causes of aging.

Anti-bacterial

Testing by qualitative and/or quantitative approaches, the test determines anti-bacterial effectiveness of the fabric.

Anti-mold

The test evaluates how good the fabric is in resisting growth of fungus and mildew. This is particularly important for garments and equipment intended for outdoor use.

De-odorization

Targeting major chemical causes of odor, the test measures the odor reduction rate of fabric.

Moisturizing

Collagen keeps our skin and cells young and moisturized, and we can measure the amount of collagen in the fabric.

Far Infrared

Through transforming heat energy into far infrared, the garment can generate warmth for wearers and keep them warm in extreme cold landscape. We can measure the weave length re-radiated from the fabric to determine its far infrared property.



FUNCTIONAL

Windproof

The test measures the air permeability of the fabric. The lower the air permeability, the better the fabric is in windproofing.

Water Resistance

As a very common marketing feature of almost all outdoorwear and outdoor gear such as bags and tents, water resistance measures how resistant the fabric is against water penetration under rain or storm.

Water Repellency

Mostly associated with "shower proof" outdoorwear, water repellent fabric is used to keep wearers dry. Leveraging the hydrophobic property of water (also known as the "lotus effect"), water droplet and snow can be repelled easily from fabric without wetting it.

Anti-static

Created to prevent discomfort caused by static and offer safety in environments vulnerable to static, anti-static fabric can be tested for its resistance to static electricity.

SAFETY

UPF

Ultraviolet Protection Factor (UPF) is used to measure the UV protection capability of fabric/ garments. As exposure to UVA and UVB are deemed harmful to human body, some key retailing markets such as US and China impose regulatory requirement on UPF claim.

Visibility

Neon green or fluorescent yellow are frequently used in apparel and body accessories worn outdoors. Apart from simply being a design element, these visible colours keep the wearers safe in the dark. We can customize visibility test for fabric made by fluorescent colourants and/or retroreflective materials or photoluminescence to simulate different scenarios. Hunter orange, as told by its name, can also be tested to ensure it is functional for hunting purposes.

Camouflage

Uniforms made from camouflage fabric are used in hunting to minimize the chance of being discovered. We measure the spectral reflectance of the camouflage pattern on the fabric to verify this claim.

DURABILITY MATTERS

To better stimulate real use of the garment, repeated washes are often conducted before high performance testing. This is particularly essential for functions achieved by coating and finishing such as anti-bacterial, anti-mould, water resistance, water repellency and UPF. Similarly, sunlight exposure leads to deteriorated performance of outdoor gear prematurely. Weathering tests are typical options prior to high performance tests. From innovation to manufacturing to retailing, Intertek can help you succeed in the Athleisure market.

HIGH PERFORMANCE APPAREL TESTING RECOMMENDATIONS

COMFORT	OUR RECOMMENDATIONS	
Quick Dry	Absorbency	AATCC 79 JIS L1907
	Wicking	AATCC 197 JIS L 1907
	Drying Rate	AATCC 199 AATCC 201 JIS L 1096
Breathability	Water Vapour Permeability (WVP)	ASTM E96 JIS 1099 BS 7209
	Water Vapour Resistance (Ret)	ASTM F1868 ISO 11092 (EN31092) JIS L1099
Moisture Management	AATCC 195	
Thermal Regulation	Cooling	Qmax (FTTS-FA-019)
	Warming by Moisture absorbing exothermic fabrics	GB/T 29866 In-house
	Thermal retention	ASTM D1518 (clo value)
Stretch & Recovery	ASTM D 3107	
	ASTM D 2594	

HEALTH & BEAUTY	OUR RECOMMENDATIONS
Anti-aging	Intertek method
Anti-bacterial	Qualitative AATCC 147
	Quantitative AATCC 100
Anti-mold	AATCC 30 III
	ASTM G21
De-odorization	FTTS-FA-018
	ISO 17299-2 / ISO 17299-3 / JEC 301
	GB/T 33610.2
Moisturizing	Intertek method
Far Infrared	FTTS-FA-010

FUNCTIONAL	OUR RECOMMENDATIONS
Windproof	ASTM D737
	ISO 9237
Water Resistance	ISO 811 (EN 20811)
Water Repellency	EN ISO 4920
	AATCC 22
Anti-static	AATCC 76

SAFETY	OUR RECOMMENDATIONS
UPF	ASTM D6544/ D6603/ AATCC 183
Visibility	EN 1150 (for fluorescent colorants)
	ASTM E809 / ASTM E1809 (for retroreflective materials)
	JIS Z 9107 / DIN 67510 (for photoluminescence)
Camouflage	MIL-DTL-44436B
	MIL-C-43031D

HIGH PERFORMANCE APPAREL FROM HEAD TO TOE

FITNESS

- Anti-aging
- Anti-bacterial
- Breathability
- De-odorization
- Moisturizing
- Quick Dry
- Stretch & Recovery

YOGA

- Anti-aging
- Anti-bacterial
- Breathability
- De-odorization
- Moisturizing
- Quick Dry
- Stretch & Recovery

HIKING

- Anti-bacterial
- Breathability
- De-odorization
- Quick Dry
- UPF
- Visibility

SKIING

- Anti-bacterial
- Breathability
- De-odorization
- Far Infrared
- Visibility
- Thermal Regulation
- Water Repellency
- Water Resistance
- Windproof

WORKWEAR

- Anti-bacterial
- Anti-Static
- Breathability
- De-odorization
- Water Repellency
- Water Resistance
- Windproof

RUNNING

- Anti-bacterial
- Breathability
- De-odorization
- Quick Dry
- UPF
- Visibility

GOLF

- Anti-bacterial
- Breathability
- De-odorization
- Quick Dry
- UPF

TEAM SPORTS

- Breathability
- Anti-bacterial
- De-odorization
- Quick Dry

FISHING

- Anti-bacterial
- Breathability
- De-odorization
- Quick Dry
- UPF
- Visibility
- Water Repellency
- Water Resistance
- Windproof

MOUNTAINEERING

- Anti-bacterial
- Breathability
- De-odorization
- Far Infrared
- Quick Dry
- Thermal Regulation
- Visibility



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