



# YUMA SUNCOOL

## Functional high quality sunscreen fabric

*SUNCOOL IS SELECTED FOR MAJOR PROJECTS*



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### FUNCTIONALITY:

- ① Super fireproof and flame retardant, challenging all global fire certification.
- ② Super sun resistance and aging resistance.
- ③ Super health and environmental protection.
- ④ SUNCOOL sunscreen fabric can purify the air - the world's first.

### HIGH-QUALITY:

- ① Good flatness.
- ② High dimensional stability.
- ③ Grade A quality standard for small yellow hat.
- ④ Packaging is also part of quality.



**FUNCTIONALITY**

# FUNCTIONALITY:

## Super fireproof and flame retardant, challenging all global fire certification



The global supply chain purchases fire and flame retardant additives, and the laboratory adopts specific formula to ensure that Senku fabric has super fire and flame retardant performance. SUNCOOL sunshine fabric has passed the national standard B1 (GB8624 oxygen index test and GB/T17591 vertical combustion method). It will self extinguish without flame spread and protect your life and property.

At the same time, American Standard nfpa701, Canadian can / ulc-s109, French standard M1 and other global authoritative fire protection certifications can meet the fire protection requirements of public buildings in Asia, Europe, the United States and other countries and regions.

Test items	Testing process	Test results
GB20286	1, oxygen index $\geq 32\%$ ; 2, continuous combustion time $\leq 5$ seconds, smouldering time $\leq 5$ seconds, damage length $\leq 150\text{mm}$ ; 3, burning dripping did not cause cotton burning or smouldering; 4, Smoke density grade (SDR) $\leq 15$ ; 5, Toxicity level of smoke production is not lower than ZA2 level.	Certification passed
GB8624	1, Oxygen index: $32\%$ ; 2, continuous burning time $\leq 5$ seconds, smouldering time $\leq 15$ seconds, damage length $\leq 150\text{mm}$ ; 3, burning dripping did not cause cotton burning or smouldering.	Certification passed
GB/T17591	Continuous burning time $\leq 5$ seconds, smouldering time $\leq 5$ seconds, damage length $\leq 150\text{mm}$	Certification passed



# FUNCTIONALITY:

**Super fireproof and flame retardant,  
challenging all global fire certification**

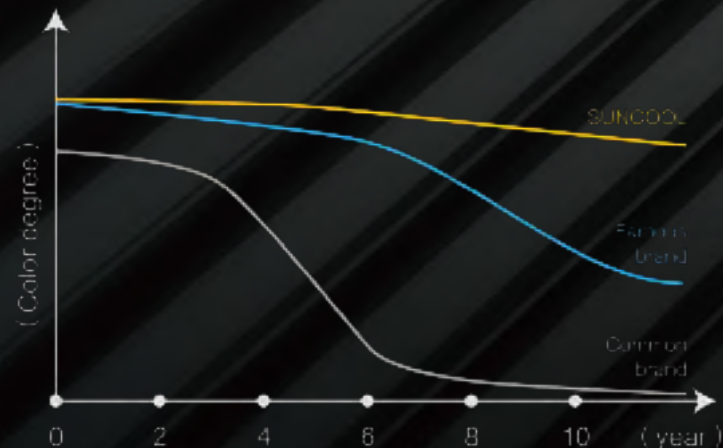


Test items	Testing process	Test results
M1	1, temperature (23±2) °C and humidity (50±5) %, mass balance for 48 hours; 2, electric spray gun test, combustion time ≤5 seconds; 3, no melting drop.	Certification passed
EN13773	1, the warp direction contact the fire source within 20 seconds does not cause the fabric burning; 2, weft direction contact fire source within 20 seconds does not cause fabric combustion; 3. The test result is grade 1 flame retardant (grade 1-5, the highest is Grade 1).	Certification passed
NFPA701	1, temperature 105°C±3°C, drying for 30 minutes; 2, continuous combustion time ≤2 seconds, average weight loss percentage ≤40%; 3, no violent combustion, no melting drops, no stimulus smoke.	Certification passed
CAN/ULC-S109	1, temperature 105°C±2°C, stand for 30 minutes; 2, combustion failure distance (mean ≤165mm, maximum ≤190mm); 3, drop combustion time ≤2 seconds.	Certification passed

# FUNCTIONALITY:

## Super sun resistance and aging resistance

High color fastness to light: it adopts the imported toner from BASF of Germany and Clariant of Switzerland, which has high color, good antioxidant performance and is not easy to fade. Tested by SGS, an international authority, The color fastness of SUNCOOL sunscreen fabric reaches grade 8 of the national standard to ensure that the fabric will not fade for 8-10 years.



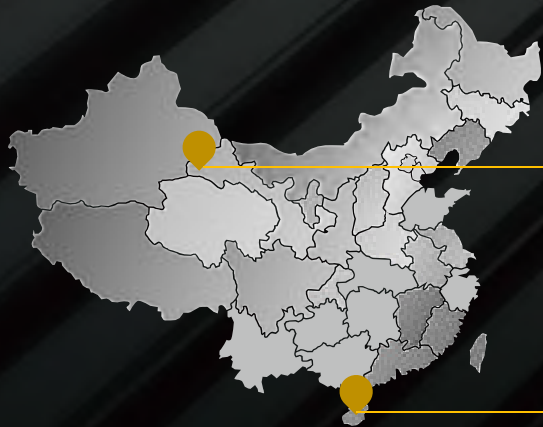


# FUNCTIONALITY:



## Super sun resistance and aging resistance

Durable and anti-aging: BASF anti-aging additive imported from Japan and titanium dioxide R type imported from Japan. Listed enterprises purchase high-quality native PVC, which has super ultraviolet resistance, heat resistance and weather resistance. The laboratory ultraviolet aging test shows that SUNCOOL sunscreen fabric can delay the aging phenomena such as color decline, fading, solid pulverization and mechanical strength decline caused by ultraviolet irradiation. Ensure that the service life of the fabric is up to 24 years.



Experiment location: Dunhuang, Gansu Province.

Experimental temperature:  $70^{\circ}\text{C} \pm 5$

Environmental characteristics: dry climate, strong ultraviolet radiation, large temperature difference between day and night.

Test results: no aging, cracking and powder phenomenon.

Experiment location: Sanya, Hainan Province.

Experimental temperature:  $70^{\circ}\text{C} \pm 5$

Environmental characteristics: Low latitude, tropical Marine climate, wet.

Test results: no aging, cracking and powder phenomenon.

# FUNCTIONALITY:

## Super health and environmental protection

Authoritative certification: SUNCOOL sunscreen fabric has passed the following certification at one time:

Gold certification of UL company (GREEN GUARD, INDOOR AIR QUALITY CERTIFICATION)

STANDARD 100 by OEKO-TEX,

Ten ring certification

ASTM G21 (determination of fungal resistance of synthetic polymer materials)

ASTM E2149 (Standard Test Method for determining the antibacterial activity of fixed antibacterial agents under dynamic contact conditions)

Reach certification (regulations on registration, evaluation, licensing and restriction of chemicals) GB/T20944.

The antibacterial performance test of textiles has reached the highest level, fundamentally controlling the volatile substances such as phthalic acid, aromatic hydrocarbon, SVHC (substances of high concern), pH value, TVOC, free formaldehyde and heavy metals, so as to ensure the health and environmental protection of YUMA SUNCOOL sunscreen fabric.



GREENGUARD  
GOLD



STANDARD 100  
by OEKO-TEX



Ten ring  
certification



REACH



ASTM G21



# FUNCTIONALITY:

## Super health and environmental protection



Ten ring certification



GREENGUARD GOLD



REACH



Phthalic acid detection



Lead-free certification



CALIFORNIA TITLE19



Mildew proof authentication



Antibacterial certification



Anti-formaldehyde & anti-static



CTTC TEST REPORT

# FUNCTIONALITY:

## SUNCOOL sunscreen fabric that can purify the air - the world's first

Yuma SUNCOOL purified air series takes zeolite, a safe material recognized by FDA of the United States, as the raw material, and the modified zeolite and formaldehyde removal solution jointly developed with the Korean National Research Institute, which are mixed in SUNCOOL sunscreen fabric.

More thorough adsorption of indoor free formaldehyde, ammonia and benzene; By adding unique formaldehyde removal solution, the harmful gases such as free formaldehyde, TVOC, ammonia and benzene in the indoor air can be decomposed twice, and the indoor air purification rate can reach more than 85%.

Authoritative certification: the air purification effect has been tested and certified by Guangzhou microbiological analysis and testing center and KCL authority in Korea.





# FUNCTIONALITY:

## SUNCOOL sunscreen fabric that can purify the air - the world's first

SUNCOOL  
玉马森酷 苛求品质

BY YUMA

### Zeolite

Zeolite, a material certified by the U.S. food and drug administration, that is filled with tiny pores, with 1 cubic micron of 1 million nanoscale pores, provides a huge surface area, equivalent to the area of a football field, is the world's most widely used natural one.



### Adsorption + decomposition prevent secondary pollution

Zeolite microcrystalline fabric is through extract ultra-micro-level microcrystalline from the zeolite and grafted to textile fabrics to purify the air. This technology was developed by us with the KITECH in Korea, and has now been successfully applied to products. The purification rate of harmful substances in indoor air is more than 90%.



### KCL testing

Ammonia removal rate 92.1%  
Formaldehyde removal rate 88.2%

Continue to remove formaldehyde in the medium term.

### Gmicro testing

Ammonia removal rate 83.9%  
Formaldehyde removal rate 83.3%

**HIGH-QUALITY**



# HIGH-QUALITY:

## GOOD FLATNESS

SUNCOOL fabric has good flatness, full-width test without cupping, no loose edge, no wavy face. Suitable for the need of full-width, good visual effects and beautiful decoration.

SUNCOOL fabric has no problem with flatness when the width is 3 meters and the height is 10 meters after testing.



SUNCOOL  
FOCUS ON QUALITY

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# HIGH-QUALITY:

## HIGH STABILITY

With the best raw material and technique to ensure that the product size is constant and low shrinkage. Not affected by temperature changes or climate anomalies and so on.

In the sun exposure, repeated use of the environment is not deformed, not distorted, stable quality, long life, and high customer satisfaction.





# HIGH-QUALITY:

## A-LEVEL QUALITY STANDARD WITH LITTLE YELLOW HAT

As the A-level quality standard mark of Yuma SUNCOOL, the little yellow hat is highly recognizable.

Yuma SUNCOOL is highly emphasized on quality. The A-level quality standard is much higher than the average level in the market. It is recognized as synonymous with high standards and strict requirements in the industry.

The quality report sheet is attached to track the condition of the fabric and improve the utilization rate.





# HIGH-QUALITY:

## UNIQUE PACKAGE

The unique innovative packaging method, the internal shock-isolating layer design, and the standard paper tube packaging ensure that there is no indentation and deformation problems during the transportation and storage of the fabric.

The unified little yellow hat packaging meets product circulation, sales and consumers requirements with applicability, reliability, safety and durability. Ensure product quality and continuously improve customer satisfaction.







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### Classic Series

Classic plain pattern



### Jacquard Master Series

Dedicated to five-star hotels



### Fiberglass Series

High fire retardant & mechanical properties



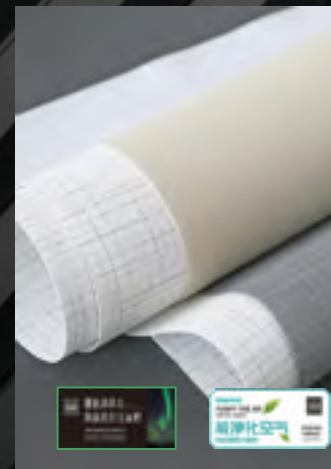
### Engineering "Win" Series

Brand differentiated marketing



### Functional Series

Purity air & high antibacterial mold proof



### Exterior Product Series

Exterior Product Special fabrics







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# CREATING NEW VALUE

SUNCOOL has many of the world's engineers, using the best raw materials at home and abroad, equipped with the most advanced Taiwan granulator, German constant tension coating winding system, German DORNIER loom and automatic constant tension setting equipment; special treatment process, strict quality control team and multi pass inspection process ensure that SUNCOOL fabrics have good performance and stable quality.

# I SUNCOOL R&D CENTER:

Established R&D center, international innovation team, and equipped with the most advanced R&D and testing equipment, which includes new materials and pattern innovation R&D laboratory, precision textile research laboratory, formaldehyde detection, color fastness, fabric fire grade testing room, etc.

SUNCOOL always focuses on "demanding quality" and provides "first-class products and services" for the industry, creating new value for customers.

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INNOVATIVE DESIGN  
OF PATTERN



ANTIBACTERIAL AND MILDEW  
PROOF EXPERIMENT



FORMALDEHYDE TEST



FIRE GRADE DETECTION



FORMALDEHYDE CONTENT DETECTION



SOLAR COLOUR FASTNESS TEST



INNOVATIVE MATERIALS LABORATORY



FABRIC STIFFNESS TEST



# Lean Manufacturing

Granulation

Snagging

Warping

Weaving

Setting

Packing



Granulation

Snagging

Warping

Weaving

Setting

Packing

SUNCOOL  
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## GRANULATION

Advanced Taiwan granulation equipment



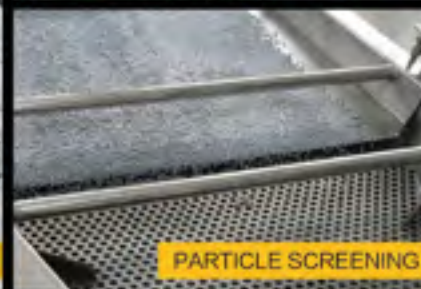
SUNCOOL POLYMER MASTERBATCH



MIXER



EXTRUDER



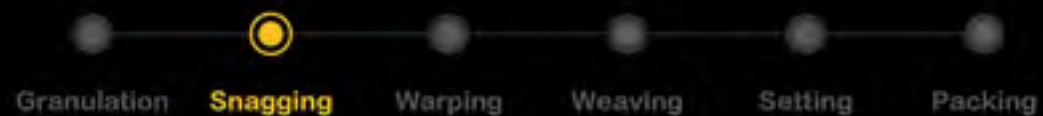
PARTICLE SCREENING



STIRRING, BARRELING

SUNCOOL sunscreen fabric is made of high-quality yarn imported from South Korea; PVC is purchased from public companies;  
All additives are certified by the international authoritative testing organization SGS;  
Good materials ensure a good feel of the fabric, good visual effects.





SUNCOOL  
FOCUS ON QUALITY

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## SNAGGING

German constant tension coating winding system.



The German constant tension coating winding system ensures the uniformity of yarn snagging;



SAHM SNAGGING MACHINE



LASER CALIPER



PRECISION WINDING SYSTEM

The German constant tension coating winding system ensures the uniformity of yarn snagging;  
The speed of each SAHM snagging machine is >700m/min;  
the strong production capacity ensures the timeliness of the supply of SUNCOOL sunscreen fabrics.



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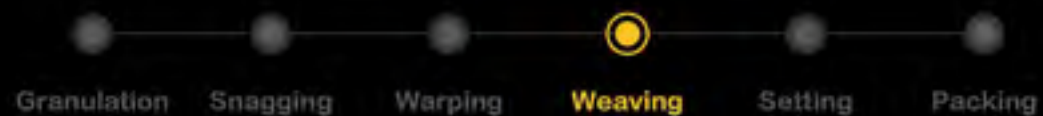
## WARPING

Intelligent & large & high-speed warping production line.



SUNCOOL has many large & high-speed warping production lines, warping density is uniform the number; length and color warp arrangement cycle of warp yarm exceed the weaving process standard. Warping arrangement is uniform, tension is stable, and production efficiency is high. Imported equipment and strict process requirements ensure that the quality of SUNCOOL fabrics is stable.





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## WEAVING

Dornier imported looms used in the factory.



WEAVING PRODUCTION LINE



DORNIER LOOM



WEFT TENSION CONTROL SYSTEM



INDEPENDENT ELECTRONIC WARP  
MOVEMENT SYSTEM

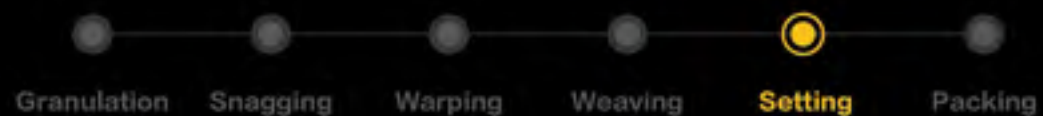


RIGOROUS PRODUCTION

Advanced German DORNIER looms

weaving width 2, 2.5, 3 meters and custom width fabric.

The most advanced equipment and variety of models of loom, let you have more when ordering SUNCOOL products choice.



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## SETTING

Automatic constant tension setting equipment.



With a special treatment process and strict quality control, each product undergoes multiple inspection procedures, ensure the excellent performance and stable quality of SUNCOOL fabrics.





SUNCOOL  
FOCUS ON QUALITY

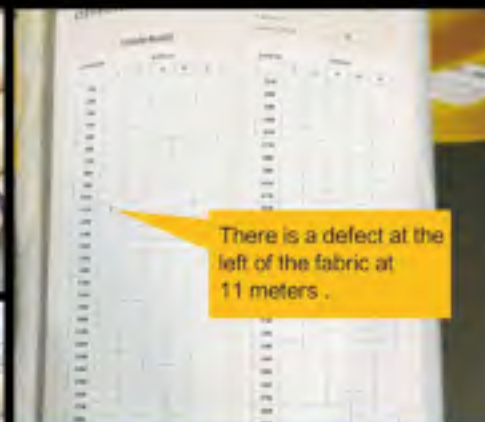
BY YUMA

## PACKING

Yellow end cap.



"Little Yellow Cap" presents SUNCOOL highest-quality products to customers, differentiates the brand feature from the current products on the market. It is visually differentiated.



There is a defect at the left of the fabric at 11 meters .

The quality report sheet and fabric defects are written into the quality report sheet and packed into the fabric together, which is convenient for avoiding the use of the defect position to improve the utilization rate of the fabric.

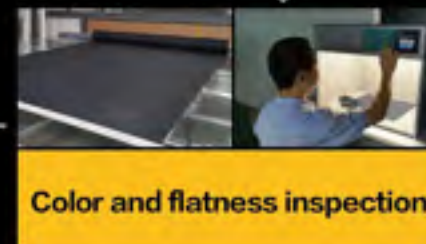


With the upgrade and stability of SUNCOOL Sunshine fabric, SUNCOOL is also upgraded to "yellow end cap" in packing and package appearance. "Little yellow hat" is an upgrade of SUNCOOL differentiated brand marketing, and it is also an affirmation of SUNCOOL sunscreen fabric's own products.



# TQM

## TOTAL QUALITY MANAGEMENT





# CUSTOMER VALUE

**5** YEARS

## OF QUALITY GUARANTEE

SUNCOOL sunscreen fabrics are made of ultra-strength imported filament, professionally coating equipment, and manufactured by German and Italian equipment. Professionals strictly control multiple processes, making SUNCOOL sunscreen fabrics the “four good and four high” eight quality advantage, providing you with 5 years of quality assurance.

### SERVICES

SAMPLE

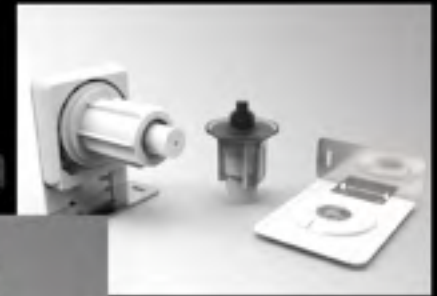
DESIGN

BRAND

ACCESSORIES



Design



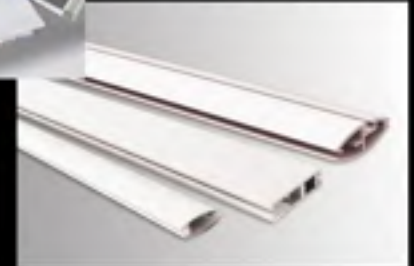
Accessories



Sample

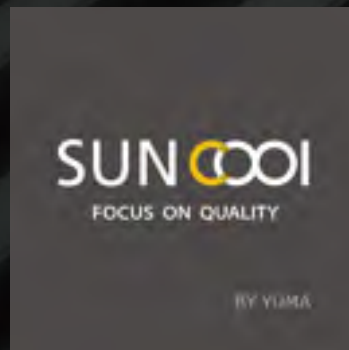


Brand



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