

LABON TECHNICAL TEXTILE

Technical Fabrics

Introduction



Labon was founded in 2005 and has emerged as a high-tech enterprise by dint of enormous scientific capability and independent intellectual property. Labon has been relentlessly committed to special fibers with breakthrough technologies as well as well-performing textile-based protection products. On the strength of its professional and tailored service, Labon further provides quality products and effective solutions in domains of safety production, engineering, etc. Labon now boasts recognition from established enterprises worldwide in the fields of industrial fibers and technical textiles.

Labon Organization



R&D Centre

Labon has set up R&D centers in Yancheng and Shanghai, and actively cooperates with Changzhou University and Donghua University in scientific research.



Production Centre

With a production system ranging from fibre manufacturing to spinning and weaving, Labon has three production bases in Yancheng City, Jiangsu Province.



Operation Centre

Labon operation center is set up in Songjiang District, Shanghai, with a total of more than 50 sales staff for domestic and foreign sales, serving customers in more than 100 countries and regions. Labon is always committed to providing good products and at the same time providing the best service to all customers.

In vigorous pursuit of innovation, Labon has developed several technology patents with numerous brands under its belt. Upholding the principle of efficiency, acuity and responsibility, Labon is devoted to providing better products and services to its customers around the world.

Labon Factories



With an aspiration to establish a stronger connection to the global market, Labon has set up delivery centers in South Asia and North America, in furtherance of technical support and after-sale service for its partners.



- Production Centre
- Chinese Storage



China Labon

Yancheng, Jiangsu, China



- Fiber Processing Centre
- Overseas Storage



USA Labon

Spartanburg, SC, USA



- Sales Centre
- Overseas Storage



Pakistan Labon

Sialkot, Pakistan



Factory Production Shop







•









Fiber Processing

Yarn Production

Dyeing Factory

Weaving Factory

Finishing Factory

Warehousing

Individual Protection Standards



- Conversant with the varied industrial standards, Labon is qualified to provide tailored special fabrics at the request of its customers from different regions.
- The production and development processes have been tested in authorized laboratories and relevant certificates have been issued.
- Tested in the UL laboratory, Labon gained UL authentication of aramid yarns and fabrics in 2018.



GA10-2014 The national standard on fireman's protective clothing for firefighting

The standard specifies the terms and definitions, model, style, type, specification, design requirements, performance requirements, test methods, inspection rules, marking, packaging, transportation and storage of fireman's protective clothing for firefighting. This Standard is applicable to fireman's protective clothing during firefighting. This Standard also works for firefighting commanding clothing.



GB8965.1-2020 The national standard on protective clothing - flame retardant protective clothing

The Standard refers to the protective clothing that prevents itself from ignition, flaming and flameless combustion for a certain period of time after contact with flames and hot objects.

This standard applies to flame retardant protective clothing that is used in places where there are open flames, sparks, or where there are flammable substance and flash over risks.



NFPA 70E The US Standard on Arc-resistant Workwear Testing

Under US law, employees must wear flame-retardant workwear that is sufficient to withstand potential energy hazards in work environments where electric arcs may be present. Workwear must undergo an arc protection analysis to determine the potential energy hazard and arc protection limits. The protective clothing must comply with the corresponding hazard or hazard category for which the calculated incident energy or arc rating is at least the specified value.

ATPV Levels of arc thermal performance value

Grade 2: 8cal/c m² -24.9cal/c m²

Grade 1: 4cal/c m² -7.9cal/c m²

Grade 3: 25cal/c m² -39.9cal/c m²

NFPA 2112 The US Standard on Flame Resistant Garments

The standard requires that the garment should be washed 100 times and then placed on a mannequin exposed to the flame for 3 seconds. In order to meet the standard, the test must show less than 50% burns on the whole suit.

NFPA 1977 The US Standard on Protective Clothing and Equipment for Wildland Fire Fighting

The performance standards that the clothing and other original items of protective clothing for firefighters are required by the US law to cope when faced with a potential forest fire.

EN ISO 11612 The EU Standard on the Testing of Clothing to Protect against Heat and Flame

This standard replaces the withdrawn EN531 standard and concentrates on clothing that protects workers (except welders and firefighters) who are exposed to heat, flames and molten metals, stipulating tests of overall performance, structure design, dimensional stability, flame spreading, heat resistance, molten metal, size and shipping marks.

EN ISO 11611 The EU Standard on Protective Clothing for Used in Welding and Allied Processes

This Standard replaces the withdrawn EN470-1 standard and stipulates the influence of the spatter (small splashes of molten metal) on the performance of fabrics.

LEVEL1 $\geq \bigcirc \times 15$

LEVEL2 \geq \wedge \times 25





Products for Industrial Use

From its fiber to fabric blended with different materials, on the strength of its integrated production Line, Labon meets all the safety standards in industry thus providing varied protection solutions for its customers. It pays attention to fabric Light weight with comfort and aesthetics combining its effective functional of chemical protection, thermal protection, anti-static protection etc. Meanwhile Labon has added anti-bacterial, waterproof and oil proof, moisture absorption and perspiration and other additional functions into its product.



Flame Retardant Products

- Labon produces tailored fabrics and yarns comprised of mixed fabric materials for a variety of applications to meet customer needs.
- All fabrics can be treated with waterproof, greaseproof, anti-static, anti-bacterial, insect resistant, pilling resistant, stiffening and other processes at request.

Flame Retardant Fabrics

Aramid IIIA	Meta-aramid/Para-Aramid/Anti-static fiber
Aramid fabric	Meta-aramid/Anti-static fiber
Aramid blended fabric	Meta-aramid/Para-Aramid fiber
Meta-Aramid/FR Viscose blended fabric	Meta-aramid/FR Viscose fiber
Modacrylic/FR Viscose blended fabric	Modacrylic/FR Viscose fiber
Modacrylic/FR Cotton blended fabric	Modacrylic/FR Cotton/Anti-static fiber
FR Cotton fabric	FR Cotton fiber
FR Cotton/Nylon blended fabric	FR Cotton/Nylon fiber

Woven/knitted fabrics are optional. All colors are optional.



Oeko-Tex 100



EN ISC 11611



EN ISO 11612



EN 1149









FR Cotton Fabrics

Labon FR cotton fabrics excel in the crucial performance areas of flame resistance, thermal protection, comfort, and durability.

Guaranteed flame resistant for the life of the fabrics in either high-temperature industrial or home washing procedures, they provide multipurpose protection from electric arc flash, flash fire, molten ferrous metal and welding exposures.

Fabric's Features

Composition: 100% Cotton, Cotton/Nylon, Cotton/Antistatic etc.

Weight: 200gsm-500gsm (6.7oz-14.7oz)

FR treatment Type: THPC

Multifunctional Processing:

Different functions such as oil resistant, water repellency, acid and alkali resistant, antistatic, moisture wicking, water pressure resistant, anti-mosquito etc. can be combined.









Arc Resistant Products



- Permanently flame-retardant, all materials in this series are will not underperform after repetitive washing, not melt in the event of an arc explosion, and will not shrink in size at high temperature. ALL fabrics can be treated with waterproof, greaseproof, antistatic, antibiosis, insect resistant, pilling resistant, stiffening and other processes at request.
- Executive standard:

DL-T 320-2010

ASTM F1959

IEC 61482-1-1

Industry Standard

ina Electricity & Power American Society for Test-International Electrotechniing and Materials

cal Commission

Arc Resistant Fabrics

a-Aramid/FR Viscose blended fabric	Meta-Aramid/FR Viscose fiber	Level 2
)dacrylic/FR Viscose blended fabric	Modacrylic/FR Viscose fiber	Level 2
pdacrylic/FR Cotton blended fabric	Modacrylic/FR Cotton fiber	Level 1-2

and colors of fabrics for weaving and knitting are optional.



Heat Resistant Products

• Labon develops a set of permanently heat resistant fabrics with aluminum coating. Wearers are kept away from spatters (small splashes of molten metal) and heat damage. All the materials used by Labon are permanently flame retardant.

Heat Resistant Fabrics

Aramid/Pre-oxidized PAN aluminized fabric	Aramid/Pre-oxidized Pan fiber	Green
Aramid/Fiberglass aluminized fabric	Aramid/Fiberglass	Yellow
Aramid aluminized fabric	Para-Aramid fiber	Yellow
Modacrylic/Fiberglass aluminized fabric	Modacrylic/Fiberglass	White



Most fire protection fabrics are mainly made from para-aramid or meta-aramid. With fabrics heat resistant, the fabrics are melt drop-free while burned, and are flexible, comfortable and breathable. Wearers are allowed to move freely while executing missions.

In addition to its flexibility, aramid fabrics improves durability and strength as well as resistance to tearing and scraping.

Labon specializes in the research and application of fire protection fabrics. Its products extend to clothing for fire protection, emergency rescue, heat resistance for firefighters, as well as glove fabrics and hood fabrics for fire protection.



Protective Clothing for Firefighters

This series of products are mainly applied to rescue missions of city and forest fire.

Protective clothing used in firefighting comprises of the following layers as outer fabrics, waterproof and breathable fabrics, skin friendly fabrics. The products are permanently flame retardant, anti-static, anti-deflagration, resistant to general chemical corrosion, water- and grease- proof, and can absorb and release sweat.



Firefighter Outer Fabric

- Dope dyed Aramid IIIA fabric
- Para-Aramid/Meta-Aramid blended fabric
- Aramid with Neoprene coating fabric

Insulating layer Fabric

Para-Aramid/Meta-Aramid non-woven fabric

Waterproof Breathable layer Fabric

Aramid with PTFE laminated faric

Comfortable layer Fabric

- Aramid/FR Viscose fabric
- Meta-Aramid fabric

Firefighter Glove fabric

- Dope dyed Aramid IIIA check fabric
- Para-Aramid knitted fabric
- Para-Aramid non-woven fabric

Firefighter Hood Fabric

- Meta-Aramid knit fabric
- Aramid/FR Viscose knit fabric

Trim

• Flame retardant zipper







Products for Racers

Professional racers can better perform at the most possible level of safety when wearing the comfortable and flexible protective clothing. The product is made from meta-aramid, acrylic and polyurethane fibers, viscose fiber and other fire retardant materials, and carbonize without molten drop in the event of an accident.



a single layer.

The mixed fabrics of modacrylic/FR viscose fibers are comparably economical and comfortable, while aramid fabrics are stronger and more durable.









EN388:2016

EN13594:2015 EN17092:2020

SFI 3.2A/3.3/3.4

FIA 8856-2018

Racing Protective Clothing Fabric

Para-Aramid knitted fabric Para-Aramid fiber Meta-Aramid knitted fabric Meta-Aramid fiber Modacrylic/Flame Retardant fabric Modacrylic/FR Viscose fiber FR Cotton fabric FR Cotton fiber

Racing Protective **Glove Fabric**

- Meta-Aramid knit fabric
- Para-Aramid knit fabric
- Others Racing Accessories

Hood Socks usually use meta-aramid fabric



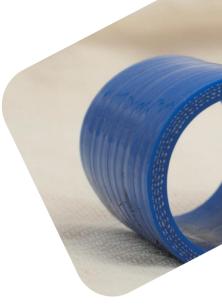


Industrial fabric characteristics



Heat resistant

Remaining long-term and short-term reliability under 260°C and 300°C.





Inherent flame retardant

Limit oxygen index (LOI) exceed 28%, carbonization starts at temperature above 370°C.



Resistant to chemical erosion

Highly resistant to weak acid and alkali, as well as most organic solvent.





Textile flexibility

High fracture resistance and elongation at break ensure the strength of the final product, endow the product with favorable service life and better injection tolerance.



Fabrics specification

60GSM-360GSM

Technology Protects Human Beings

Contact



Shanghai Labon Technical Fiber Co.,Ltd.



Tel:+86-21-68132568





Address: No.4855, Guangfulin Road Building No.17, Songjiang District, Shanghai, China



Fax:+86-21-68133508



E-Mail:info@labonfibers.com