



# Flame Retardant fabrics for FR-Clothing





## WHY CHOOSE OUR FR-FABRICS?

XM FireLine™ designs and manufactures Flame Retardant fabrics for protective and fr-clothing.

We have 15 years experience of work with protective clothing and today we sell our fr-fabrics on 6 continents in 51 countries. XM FireLine™ represented by offices in Asia (in Shanghai), Europe (Lithuania, Romania, Spain, Portugal, Poland and Russia) and South America (Sao-Paulo).

We have 18 different flame retardant fabrics in our product range and 12 of them we have always in stock in 6 main shades. Other 6 fr-fabrics we make per order.

All our FR-fabrics resist 50/100 wash cycles and certified to ISO 11612. Some of our fabrics are also certified to EN 1149-5 for antistatic properties. We test every production lot to deliver you 100% quality.

### SAFETY & PROTECTION



XMf flame retardant fabrics protect against Heat & Flame. FR-clothing made of our fr-fabrics increases safety of workers due to proven quality, confirmed by certification in BTTG (UK), AITEX (Spain).

### QUALITY



XMf flame retardant fabrics are made with high grade combed cotton for softness and durability. We use double FR-treatment (THPC) to guarantee FR properties last 50-100 washes. Antistatic properties are provided by Belltron (Japan) antistatic carbon yarn and we use VAT dyes to have CF to washing 4-5. Every batch of XM FireLine fabrics is tested for Flame Resistance after 50 washes.

### ECO-FRIENDLY



XMf flame retardant fabrics are OEKO-TEX 100 certified. That means our fabrics consists no harmful substances and ecologically friendly to the wearers. We renew the certificate OEKO-TEX every year, since it is valid for only 12 months. XMf fabrics are also continuously tested for Formaldehyde content and the tests always confirm that our fabrics are ECO-friendly.

### FR-STANDARDS



XMf flame retardant fabrics are tested according to the requirements of European ISO system and also to the American NFPA standards. The reason is simple - we have clients all over the world and we must comply to different international standards. XMf fabrics have been tested more rigorously and have maximum compliance to FR-standards.

### FLAME RESISTANCE AFTER 100 WASHES



XMf fabrics (8 fabrics) have been tested in AITEX lab (Spain) for flame resistant properties after 100 wash cycles. The fr-fabrics undergone industrial laundry at 75°C for 100 washes according to ISO 15797. After that Limited Flame Spread test has been done by ISO 15025. No After-flame or After-glow has been observed.

### CERTIFICATES



XMf flame retardant fabrics are certified to the following standards: ISO 11611, ISO 11612, EN ISO 1149, EN 13034, EN 61482-1-2, EN 469, EN 20471, EN 14116, etc. The certificates have been obtained in international laboratories and available for download on our web-site [www.XMFireLine.com](http://www.XMFireLine.com)



# OUR FR-FABRIC RANGE



#	PAGE	WEIGHT GSM	FABRIC	DESCRIPTION	USABLE WIDTH/ CM	EN ISO 11612	EN ISO 11611	EN ISO 1149-5	EN ISO 13034	EN 61482-1-1	EN 61482-1-2
1	4	480	GEFEST-480	100% COTTON • SATIN 5/2 • FR	150	■	■				
2	6	420	GEFEST-420	100% COTTON • SATIN 4/1 • FR	150	■	■			16.1 CAL/CM <sup>2</sup>	
3	8	350	COLOMBO AS	99% COTTON • 1% <b>AS</b> • TWILL 2/2 • FR	150	■	■	1149-3	■ *	9.2 CAL/CM <sup>2</sup>	CLASS 1 (4 KA)
4	10	350	ETNA	99% COTTON • 1% <b>AS</b> • SATIN 4/1 • FR	150	■	■	1149-3		9.3 CAL/CM <sup>2</sup>	CLASS 1 (4 KA)
5	12	330	CORFU-330	99% COTTON • 1% <b>AS</b> • TWILL 3/1 • FR	150	■	■	1149-3			CLASS 1 (4 KA)
6	14	320	MADEIRA-320	100% COTTON • TWILL 3/1 • FR	150	■	■				
7	16	260	MADEIRA-260	100% COTTON • TWILL 3/1 • FR	150	■	■				
8	18	220	FIJI	99% COTTON • 1% <b>AS</b> • TWILL 2/1 • FR	150	■	■	1149-3		8.6 CAL/CM <sup>2</sup>	
9	20	300	POSEIDON-300	80% COTTON • 19% POLYESTER • 1% <b>AS</b> • TWILL 2/2 • FR • <b>MULTI-RISK</b>	150	■	■	1149-3	■	9.6 CAL/CM <sup>2</sup>	CLASS 1 (4 KA)
10	22	245	POSEIDON-245	80% COTTON • 19% POLYESTER • 1% <b>AS</b> • TWILL 2/2 • FR • <b>MULTI-RISK</b>	150	■	■	1149-3	■	10.0 CAL/CM <sup>2</sup>	CLASS 1 (4 KA)
11	24	185	SONORA/ SONORA AS	80% COTTON • 20% POLYESTER • PLAIN 1/1 • FR	150	■		1149-3			
12	26	260	VOLCANO	87% COTTON • 12% NYLON • 1% <b>AS</b> • SATIN 4/1 • FR • <b>MULTI-RISK</b>	150	■	■	1149-3	■	12 CAL/CM <sup>2</sup>	CLASS 1 (4 KA)
13	28	160	FR-LINING-160	100% COTTON • PLAIN 1/1 • FR	150	EN 14116					
14	30	120	ARAVIS-120	50% M-ARAMID • 50% FR VISCOSE • PLAIN 1/1 • FR	150	■					
15	32	210	ARTEX-210	93% M-ARAMID • 5% P-ARAMID • 2% <b>AS</b> • TWILL 2/1 • FR	150	■		1149-3			
16	34	250	MURANO-250	60% MODACRYLIC • 35% COTTON • 4% N • 1% <b>AS</b> • RIP-STOP • FR • <b>MULTI-RISK</b>	150	■	■	1149-3	■	6.9 CAL/CM <sup>2</sup>	
17	36	280	FR-FLEECE-280	60% MODACRYLIC • 39% COTTON • 1% <b>AS</b> • KNITTED FABRIC • FR	150	■		1149-3			
18	38	200	FR-JERSEY-200C	60% MODACRYLIC • 38% COTTON • 2% <b>AS</b> • KNITTED FABRIC • FR	155	■		1149-3			CLASS 1 (4 KA)
19	40	230	FR-PIQUE-230	60% MODACRYLIC • 38% COTTON • 2% <b>AS</b> • KNITTED FABRIC • FR	165	■		1149-3		8 CAL/CM <sup>2</sup>	
20	42	250	FR-OXFORD-250	98% POLYESTER • 2% <b>AS</b> • PLAIN 1/1 • FR	150	EN 14116		1149-3	EN 343		

(\*) - optional treatment, make per order

**MULTI-RISK** finish conforms to EN ISO 13034 standard and adds resistance to such substances as Water, Oil, some Acids and Alkali.

We have ALL the Certificates mentioned in the table above on our web-site to view or download in open access (no registration required).

**AITEX** (SPAIN), **BTTG** (UK), **KINECTRICS** (CANADA) ARE TESTING LABORATORIES WHERE WE TEST AND CERTIFY XM FIRELINE FABRICS.





## GEFEST-480

100% COTTON, 480 GSM, SATIN 5/2

100x  
WASH



EN 11612

A1, A2, B1,  
C1, E3, F1



EN 11611

Class 2

### FLAME RETARDANT

### COTTON FABRIC | WELDING

Flame retardant fabric Gefest-480 is designed for welders working on open sea oil-platforms, in dry docks or in naval shipyards. Gefest-480 protective fabric is also used for welding jackets and trousers in machinery, metallurgy, oil and gas pipeline construction, automotive industry, etc.

The specific feature of Gefest-480 is its fantastic tear and tensile strength. The fabric is so strong that it's impossible to tear it with bare hands. High durability of the fabric is achieved through the use of long staple cotton fibers which are twisted into the warp and weft. Such durability increases the life cycle of welder's clothing. Moreover, satin weave makes molten metal drops slide off of the smooth surface instead of sticking to it what prevents fabric from ignition. Gefest-480 is a soft fabric which makes comfortable garments and provides protection from Heat and Flame (ISO 11611 & ISO 11612 certified).

(\*) Tested in accordance to ISO 15025 after 100 industrial washes at 75 °C

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SCAN FOR  
DETAILS





# GEFEST-480

BLACK #128-01

GREY #128-02

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

ORANGE #128-07

GREEN #128-03

YELLOW #128-11

\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
GEFEST-480	100% Cotton	—	480 gsm ±5%	Satin 5 /2	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	1800 N	28 N	≤ 3%	35 000 rubs	4	
WEFT	1200 N	25 N	≤ 3%			

COLOUR FASTNESS		LIGHT	MID	DARK	
		Orange, Red, Yellow	Green, Grey	Dark Navy	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4
STAIN ON POLYESTER		4-5	4-5	4	4
STAIN ON COTTON		4	4	4	4
WET RUBBING	ISO 105 X12	3	3	2-3	2
DRY RUBBING	ISO 105 X12	4	4	4	4
LIGHT	ISO 105 B02	3	4	4	4



## GEFEST-420

100% COTTON , 420 GSM, SATIN 4/1

		
EN 11612	EN 11611	EN 61482-1
A1, A2, B1, C1, E3, F1	Class 2	16,1 $\frac{\text{cal}}{\text{cm}^2}$

### FLAME RETARDANT

### COTTON FABRIC | WELDING

Gefest-420 flame retardant protective fabric is purposed for professional welders clothing used in variety areas like machinery, metallurgy, oil and gas pipeline construction, automotive industry, etc. Satin weave of Gefest-420 is extremely useful on protective overalls, bibs and aprons for welders and other workers making molten metal drops slide off of the smooth surface of fabric easily. Being made of natural fibers it makes comfortable garments to wear and protects from risks of Flash Fire and Electric Arc.



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# GEFEST-420

BLACK #128-01

GREY #128-02

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

ORANGE #128-07

GREEN #128-03

YELLOW #128-11

\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION






Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
GEFEST-420	100% Cotton	—	420 gsm $\pm 5\%$	Satin 4 / 1	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	1700 N	36 N	$\leq 3\%$	31 300 rubs	4	
WEFT	1500 N	57 N	$\leq 3\%$			

COLOUR FASTNESS		LIGHT	MID	DARK	
		Orange, Red, Yellow	Green, Grey	Dark Navy	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		4-5	4-5	4	4
STAIN ON COTTON		4	4	4	4
WET RUBBING	ISO 105 X12	3	3	2-3	2
DRY RUBBING	ISO 105 X12	4	4	4	4
LIGHT	ISO 105 B02	3	4	4	4



## COLOMBO AS

99% COTTON, 1% ANTISTATIC YARN,  
350 GSM, TWILL 2/2

				
EN 11612	EN 11611	EN 1149-5	EN 61482-1	EN 61482-2
A1, A2, B1, C1, E3, F1	Class 2	EN 1149-3 method 2	9,2 cal cm <sup>2</sup>	Class 1

FLAME RETARDANT, ANTISTATIC

### COTTON FABRIC | WELDING

Colombo AS flame retardant protective fabric is best used in such industries as Automotive, Petrochemical, Power energetics. Made of natural fibers it is soft and comfort to wear and at the same time Colombo AS protects from risks of Flash fire, Electric Arc and ESD sparks. It is very durable and has unique balance of high tear resistance in both warp and weft directions. This endurance provided by trendy and tough weave twill 2/2. Carbon antistatic yarn woven into the surface of Colombo AS fabric makes garments absolutely safe to wear in explosive environment and ensures the necessary charge decay. Antistatic fiber prevents Electrostatic Discharge (ESD) sparks and safely discharges static electricity eliminating the risk of fire and explosion.

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# COLOMBO AS

AVAILABLE COLOURS:\*

BLACK #128-01

GREY #128-02

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

**ORANGE #128-07**

GREEN #128-03

YELLOW #128-11

\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
COLOMBO AS	99% Cotton, 1% Antistatic Yarn	Carbon (Belltron)	350 gsm $\pm$ 5%	Twill 2 /2	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	1800 N	45 N	$\leq$ 3%	26 000 rubs	4	
WEFT	1100 N	40 N	$\leq$ 3%			

## COLOUR FASTNESS






		LIGHT	MID	DARK	
		Orange, Red	Grey	Dark Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		4-5	4-5	4	4
STAIN ON COTTON		4	4	4	3-4
WET RUBBING	ISO 105 X12	3	3	2-3	2
DRY RUBBING	ISO 105 X12	4	4	4	4
LIGHT	ISO 105 B02	3	4	4	4



## ETNA

99% COTTON , 1% ANTISTATIC YARN,  
350 GSM, SATIN 4/1



				
EN 11612	EN 11611	EN 1149-5	EN 61482-1	EN 61482-2
A1, A2, B1, C1, E3, F1	Class 1	EN 1149-3 method 2	ELIM 9,3 $\frac{\text{cal}}{\text{cm}^2}$	Class 1

FLAME RETARDANT, ANTISTATIC

### COTTON FABRIC | OIL & GAS

Etna is a 350 gsm middleweight quality cotton fabric with a flame retardant finishing designed for garments used in metallurgy. Etna FR-fabric has the highest level of protection from molten metal splashes with E3, in accordance to ISO 9185. Satin weave of Etna fabric is very useful on protective overalls, bibs and aprons for welders and other workers making molten metal drops slide off of the smooth surface of fabric easily. Being made of natural fibers it makes comfortable garments to wear and protects from risks of Flash Fire, Electric Arc and ESD sparks. Carbon antistatic yarn woven in stripes makes garments absolutely safe to wear in explosive environment and ensures the necessary charge decay.

(\*) Tested in accordance to ISO 15025 after 100 industrial washes at 75 °C

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# ETNA

BLACK #128-01

GREY #128-02

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

ORANGE #128-07

GREEN #128-03

YELLOW #128-11

\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
ETNA	99% Cotton, 1% Antistaic Yarn	Carbon (Belltron)	350 gsm ±5%	Satin 4 /1	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	1400 N	38 N	≤ 3%		21 000 rubs	4
WEFT	1100 N	65 N	≤ 3%			

## COLOUR FASTNESS

COLOUR FASTNESS		LIGHT	MID	DARK	
		Orange, Red	Green, Grey	Dark Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		4-5	4-5	4	4
STAIN ON COTTON		4	4	4	4
WET RUBBING	ISO 105 X12	3	3	2-3	2-3
DRY RUBBING	ISO 105 X12	4	4	4	4
LIGHT	ISO 105 B02	3	4	4	4





# FLAME RETARDANT FABRIC FOR FR-CLOTHING

## CORFU-330

99% COTTON, 1% ANTISTATIC YARN

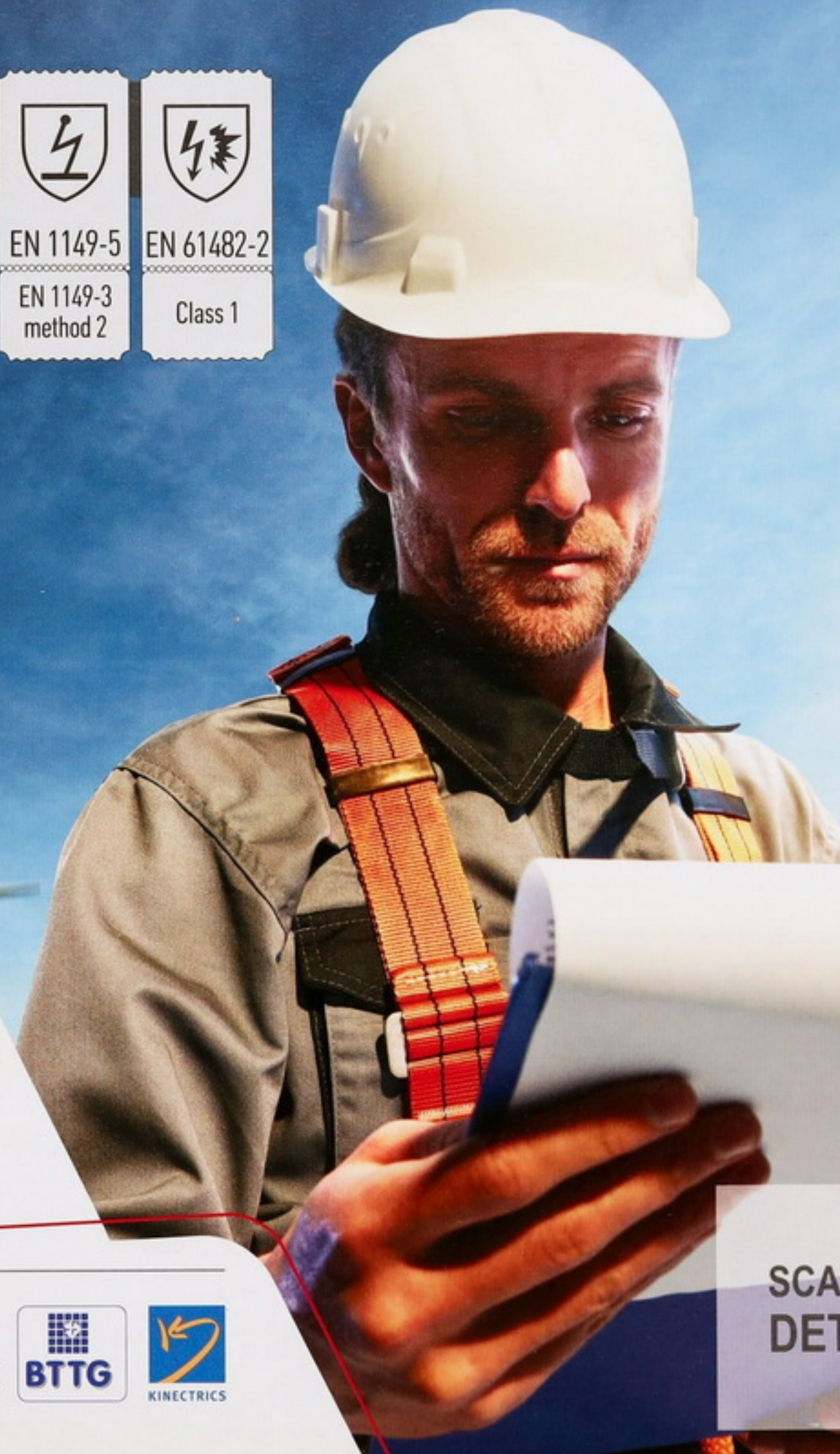
330 GSM, TWILL 3/1

			
EN 11612	EN 11611	EN 1149-5	EN 61482-2
A1, A2, B1, C1, E3, F1	Class 1	EN 1149-3 method 2	Class 1

FLAME RETARDANT, ANTISTATIC

### COTTON FABRIC | MACHINE BUILDING

Corfu-330 is a flame-retardant 100% cotton fabric with 330 gsm density, with a classic twill 3/1 weave. Made of 100% natural fibre, it is comfortable to wear as everyday flame-retardant workwear such as FR-pants, FR-jackets, FR-bibs, and FR-overalls.



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# CORFU-330

AVAILABLE COLOURS:\*



\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
CORFU-330	99% Cotton, 1% Antistatic yarn	Carbon (Belltron)	330 gsm $\pm$ 5%	Twill 3 /1	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	1100 N	28 N	$\leq$ 3%	20 000 rubs	3-4	
WEFT	610 N	25 N	$\leq$ 3%			

COLOUR FASTNESS		LIGHT	MID	DARK	
		Orange, Red	Grey	Dark Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		4-5	4-5	4	4
STAIN ON COTTON		4	4	4	3-4
WET RUBBING	ISO 105 X12	3	3	2-3	2
DRY RUBBING	ISO 105 X12	4	4	4	4
LIGHT	ISO 105 B02	3	4	4	4



## MADEIRA-320

100% COTTON, 320 GSM, TWILL 3/1



EN 11612

A1, A2, B1,  
C1, E3, F1



EN 11611

Class 1

### FLAME RETARDANT

### COTTON FABRIC | MACHINE BUILDING

Madeira-320 is a flame retardant protective fabric made of pure long staple cotton. It can be used for middleweight clothing for welding as well as in metal processing works in heavy machinery, automotive industry, etc. Madeira-320 is a balanced choice for daily used FR-trousers, FR-jackets, FR-coveralls or FR-bibs in work environment with risks of exposure to heat and flame. Being made of 100% natural fibers it makes garments comfortable to wear and protects from risks of Flash Fire and Electric Arc at the same time.

(\*) Tested in accordance to ISO 15025 after 100 industrial washes at 75 °C

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# MADEIRA-320

BLACK #128-01

GREY #128-02

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

ORANGE #128-07

GREEN #128-03

YELLOW #128-11

\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
MADEIRA-320	100% Cotton	—	320 gsm ±5%	Twill 3 /1	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	1600 N	22 N	≤ 3%	26 500 rubs	3-4	
WEFT	1000 N	17 N	≤ 3%			

COLOUR FASTNESS		LIGHT	MID	DARK	
		Orange, Red, Yellow	Green, Grey	Dark Navy, Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		4-5	4-5	4	4
STAIN ON COTTON		4	4	4	4
WET RUBBING	ISO 105 X12	3	3	2-3	2-3
DRY RUBBING	ISO 105 X12	4	4	4	4
LIGHT	ISO 105 B02	3	4	4	4



## MADEIRA-260

100% COTTON, 260 GSM, TWILL 3/1



EN 11612

A1, A2, B1,  
C1, E2, F1



EN 11611

Class 1

### FLAME RETARDANT

### COTTON FABRIC | MACHINE BUILDING

Madeira-260 is a flame retardant fabric made of long staple cotton. It can be used for lightweight and middleweight clothing in heavy machinery, automotive industry, etc. Protective clothing made of Madeira-260 FR fabric provides the wearer with comfort and protection from risks of Flash Fire and Heat. Madeira-260 is the right choice for the production of affordable fr-clothing with a high level of protection against heat and flame.

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# MADEIRA-260

AVAILABLE COLOURS:\*

BLACK #128-01

GREY #128-02

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

ORANGE #128-07

GREEN #128-03

YELLOW #128-11

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This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
MADEIRA-260	100% Cotton	—	260 gsm ±5%	Twill 3 /1	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	1100 N	28 N	≤ 3%	20 000 rubs	3-4	
WEFT	560 N	26 N	≤ 3%			

## COLOUR FASTNESS

		LIGHT	MID	DARK	
		Red	Grey	Dark Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4
STAIN ON POLYESTER		4-5	4-5	4-5	4
STAIN ON COTTON		4	4	4-5	3-4
WET RUBBING	ISO 105 X12	3	3	2-3	2
DRY RUBBING	ISO 105 X12	4	4	4	4
LIGHT	ISO 105 B02	3	4	4	4



## FIJI

99% COTTON, 1% ANTISTATIC YARN,  
220 GSM, TWILL 2/1

100x  
WASH



EN 11612  
A1, A2, B1,  
C1, E2, F1



EN 1149-5  
EN 1149-3  
method 2



EN 61482-1  
8,6 cal  
cm<sup>2</sup>



EN 11611  
Class 1

FLAME RETARDANT, ANTISTATIC

### COTTON FABRIC | LIGHTWEIGHT UNIFORM

Fiji is a light flame retardant fabric with classic twill weave, developed specially for light flame retardant clothing. Fiji protective fabric is recommended for use as a middle layer of fr-clothing, like shirts, vests, light pants, or even light overalls for hot climate. FR-clothing made of Fiji fabric in combination with fire-resistant underwear and fire-resistant outer clothes provides superb protection of workers in risk zones. Made of natural fibers it is soft and comfort to wear and at the same time Fiji FR-fabric protects from risks of Flash fire and ESD sparks. Carbon antistatic yarn integrated as stripes in the surface of Fiji makes it absolutely safe for use in explosive atmospheres. To prevent Electrostatic Discharge (ESD) sparks, antistatic fibers safely discharge static electricity eliminating the risk of fire and explosion.

(\*) Tested in accordance to ISO 15025 after 100 industrial washes at 75 °C

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SCAN FOR  
DETAILS





# FIJI

AVAILABLE COLOURS:\*

BLACK #128-01

GREY #128-02

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

ORANGE #128-07

GREEN #128-03

YELLOW #128-11

\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
FIJI	99% Cotton, 1% Antistatic yarn	Carbon (Belltron)	220 gsm ±5%	Twill 2 /1	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	1200 N	21 N	≤ 3%		20 000 rubs	4
WEFT	430 N	24 N	≤ 3%			

COLOUR FASTNESS		LIGHT	MID	DARK	
		Orange, Red, Yellow	Grey	Dark Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		4-5	4-5	4	4
STAIN ON COTTON		4	4	4	3-4
WET RUBBING	ISO 105 X12	3	3	2-3	2
DRY RUBBING	ISO 105 X12	4	4	4	4
LIGHT	ISO 105 B02	3	4	4	4



## POSEIDON-300








100x  
WASH

80% COTTON, 19% POLYESTER,  
1% ANTISTATIC YARN,  
300 GSM, TWILL 2/2

FLAME RETARDANT  
ANTISTATIC, MULTI-RISK

COTTON | POLYESTER FABRIC  
TRANSPORTATION OF OIL & GAS

Poseidon 300 is a high quality poly-cotton fabric with high content of cotton, improved by addition of polyester and antistatic yarn. It is developed for workers of Oil and Gas industries and it suits well both for rig-chiefs jackets and trousers and for oil-pipeline workers uniforms. The fabric with modern 2/2 twill weave is very comfortable to wear, has much better than pure cotton tear resistance and has excellent antistatic properties. An optional Multi-Risk treatment, makes it water repellent and also resistant to the influence of acids, alkali, grease and oil.

						
EN 11612	EN 11611	EN 1149-5	EN 13034	EN 61482-1	EN 61482-2	EN 20471
A1, A2, B1, C1, E3, F1	Class 1	EN 1149-3 method 2		ATPV 9,6 cal/cm²	Class 1	

(\*) Tested in accordance to ISO 15025 after 100 industrial washes at 75 °C

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SCAN FOR  
DETAILS





# POSEIDON-300

BLACK #128-01

GREY #128-02

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

ORANGE #128-07

GREEN #128-03

YELLOW HI-VIZ

\* Actual colours of fabric may vary.  
This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
POSEIDON 300	80% Cotton, 19% Polyester, 1% Antistatic yarn	Carbon (Belltron)	300 gsm ±5%	Twill 2 /2	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	1400 N	21 N	≤ 3%	28 300 rubs	4	
WEFT	700 N	17 N	≤ 3%			

COLOUR FASTNESS		LIGHT	MID	DARK	
		Orange, Red, Yellow	Green, Grey	Dark Navy, Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		3-4	4	2-3	2-3
STAIN ON COTTON		4	4-5	4	3-4
WET RUBBING	ISO 105 X12	3-4	3-4	2-3	2-3
DRY RUBBING	ISO 105 X12	4-5	4-5	3	3-4
LIGHT	ISO 105 B02	3	3-4	3-4	4



## POSEIDON-245

100x  
WASH

80% COTTON, 19% POLYESTER,  
1% ANTISTATIC YARN,  
245 GSM, TWILL 2/2



EN 11612  
A1, A2, B1,  
C1, E3, F1



EN 11611  
Class 1



EN 1149-5  
EN 1149-3  
method 2



EN 13034



EN 61482-1  
10 cal  
cm<sup>2</sup>



EN 61482-2  
Class 1



EN 20471



EN 14116  
INDEX-3

FLAME RETARDANT  
ANTISTATIC, MULTI-RISK

COTTON | POLYESTER FABRIC  
TRANSPORTATION OF OIL & GAS

Poseidon-245 is a lighter version of our popular fabric Poseidon-300 from XM FireLine range. Cotton rich blend ensures comfort with high quality natural fibers and features durability properties of polyester, such as higher tear and abrasion resistance. This fabric has been developed for use in a broad range of industries including petrochemical, utilities, etc., especially for hot climate countries. Modern 2/2 twill weave is complemented by Belltron® carbon antistatic yarn in a stripe pattern. Flame retardant and antistatic properties provide an excellent protection from risks of Flash Fire and ESD sparks. Poseidon-245 is optimal for summer protective FR clothes for its light weight, comfortable wearing and good level of protection.

(\*) Tested in accordance to ISO 15025 after 100 industrial washes at 75 °C

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SCAN FOR  
DETAILS





# POSEIDON-245

AVAILABLE COLOURS:\*



\* Actual colours of fabric may vary.  
This is due to the fact that colours on paper look different than colours on real fabric.

CARE INSTRUCTIONS:

Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
POSEIDON-245	80% Cotton, 19% Polyester, 1% Antistatic yarn	Carbon (Belltron)	245 gsm ±5%	Twill 2 /2	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes	Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2	
WARP	1200 N	25 N	≤ 3%	25 000 rubs	4	
WEFT	540 N	20 N	≤ 3%			

COLOUR FASTNESS		LIGHT	MID	DARK	
		Orange, Red, Yellow	Green, Grey	Dark Navy, Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		3-4	4	2-3	2-3
STAIN ON COTTON		4	4-5	4	3-4
WET RUBBING	ISO 105 X12	3-4	3-4	2-3	2-3
DRY RUBBING	ISO 105 X12	4-5	4-5	3	3-4
LIGHT	ISO 105 B02	3	3-4	3-4	4



## SONORA

80% COTTON, 20% POLYESTER,  
185 GSM, PLAIN 1/1

FLAME RETARDANT

## SONORA AS

80% COTTON, 19% POLYESTER,  
1% ANTISTATIC YARN, 185 GSM, PLAIN 1/1

**COTTON | POLYESTER FABRIC**

**TRANSPORTATION OF OIL & GAS**

Sonora-185 and Sonora-185 AS are light flame retardant fabrics for protective clothing for hot climate. Sonora-185 AS made of 80% cotton, 19% polyester, 1% antistatic yarn with flame retardant finishing. Sonora-185 is made of 80% cotton and 20% polyester with flame retardant finishing. The areas of their use are Transportation of Oil & Gas (pipelines workers), Petrochemical(refineries staff), Utilities (Electrical/Water/Gas service companies personnel) etc. High quality cotton rich blend, improved by addition of polyester, provides that Sonora fr-fabric has a comfort of natural fibers and durability, higher tear resistance and better colorfastness of polyester. Sonora-185 AS has high quality Belltron antistatic yarn embedded in its structure. These carbon stripes give to the wearer extra protection against Static Electricity sparks, which might be dangerous in explosive atmospheres of Refineries or Oil Terminals.





# SONORA/SONORA AS

AVAILABLE COLOURS:\*

BLACK #128-01

GREY #128-02

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

ORANGE #128-07

GREEN #128-03

YELLOW #128-11

\* Actual colours of fabric may vary.  
This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry  
place, with no  
direct sunlight.

SONORA

SONORA AS

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
SONORA	80% Cotton, 20% Polyester	—	185gsm ±5%	Plain 1/1	150 cm	Flame Retardant
SONORA AS	80% Cotton, 19% Polyester, 1% AS	Carbon (Belltron)	185gsm ±5%	Plain 1/1	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	750 N	16 N	≤ 3%	17 000 rubs	4	
WEFT	550 N	15 N	≤ 3%			

## COLOUR FASTNESS

		LIGHT	MID	DARK	
		Orange, Red, Yellow	Green, Grey	Dark Navy, Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		4	4-5	4	4
STAIN ON COTTON		4-5	4-5	4-5	4
WET RUBBING	ISO 105 X12	4	3	3	3
DRY RUBBING	ISO 105 X12	4-5	4	4	4
LIGHT	ISO 105 B02	3	4	4	4



## VOLCANO

87% COTTON , 12% NYLON,  
1% ANTISTATIC YARN,  
260 GSM, SATIN 4/1

100x  
WASH



EN 11612

A1, A2, B1,  
C1, E3, F1



EN 11611

Class 1



EN 1149-5

EN 1149-3  
method 2



EN 13034



EN 61482-1

12 cal/cm<sup>2</sup>



EN 61482-2

Class 1

FLAME RETARDANT  
ANTISTATIC, MULTI-RISK

### COTTON/NYLON FABRIC | OIL & GAS

Volcano is an innovative flame retardant cotton-nylon blend being extremely tear resistant yet relatively light. Durability of this fabric sufficiently increases life cycle of flame retardant garment. Weighing only 260 gsm Volcano fabric doesn't cut any corners in protective measures and meets high requirements of electric arc protection with 12 cal/cm<sup>2</sup> (defined by ISO 61482-1-1). It's also certified to ISO 11611 and ISO 11612 standards for protective clothing. Moreover, Volcano has additional Multi-Risk treatment which protects against acids, oil, grease and repels water. Multi-Risk properties are confirmed by ISO 13034 certificate.

(\*) Tested in accordance to ISO 15025 after 100 industrial washes at 75 °C

OUR PARTNERS



SCAN FOR  
DETAILS





# VOLCANO

AVAILABLE COLOURS:\*

BLACK #128-01

GREY #128-02

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

ORANGE #128-07

GREEN #128-03

YELLOW HI-VIZ

\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
VOLCANO	87% Cotton, 12% Nylon, 1% Antistatic yarn	Carbon (Belltron)	260 gsm ±5%	Satin 4 /1	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	860 N	19 N	≤ 3%	28 000 rubs	3	
WEFT	670 N	33 N	≤ 3%			

COLOUR FASTNESS		LIGHT	MID	DARK	
		Orange, Red	Green, Grey	Dark Navy, Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		3-4	4	2-3	2-3
STAIN ON COTTON		4	4-5	4	3-4
WET RUBBING	ISO 105 X12	3-4	3-4	2-3	2-3
DRY RUBBING	ISO 105 X12	4-5	4-5	3	3-4
LIGHT	ISO 105 B02	3	3-4	3-4	4



## FR-LINING

100% COTTON

160 GSM, FR-PLAIN 1/1



EN 14116

INDEX-3

FLAME RETARDANT

### COTTON FABRIC | FIREFIGHTERS

A very light flame retardant fabric made of 100% cotton with density of 160 g/m<sup>2</sup> and plain 1/1 weave. Thin, soft and pleasant to touch, yet durable and flame retardant.

Flame retardant lining is indispensable in the fr-clothing with membrane layers, such as in fire fighting covers and suits. It can also be used for warm winter fr-clothing (jacket and trousers).

Internal lining fabric is an integral part of the heat protective package, and performs several functions: isolating membrane, protecting against abrasion, increases protection against heat and provides additional comfort of worker.

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SCAN FOR  
DETAILS





# FR-LINING

AVAILABLE COLOURS:\*

BLACK #128-01

GREY #128-02

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

ORANGE #128-07

GREEN #128-03

YELLOW #128-11

\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
FR-Lining	100% Cotton	—	160 gsm ±5%	Plane 1 / 1	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	710 N	16 N	≤ 3%	35 000 rubs	4	
WEFT	470 N	13 N	≤ 3%			

## COLOUR FASTNESS

		LIGHT	MID	DARK	
		Orange, Red, Yellow	Green, Grey	Dark Navy, Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		4-5	4-5	4	4
STAIN ON COTTON		4	4	4	3-4
WET RUBBING	ISO 105 X12	4-5			
DRY RUBBING	ISO 105 X12	2			
LIGHT	ISO 105 B02	> 4			



## ARAVIS-120

50% META ARAMID, 50% FR VISCOSE  
120GSM, FR-PLAIN 1/1



EN 11612  
A1, A2,  
C1, F1

### INHERENT

### META ARAMID FABRIC | FR-TURNOUT GEAR

Aravis FR-liner is designed for fire fighter firefighter's clothing with a new level of moisture management properties. It is light, thin and inherently flame resistant.

The purpose of thermal liner is to be used as a part of 4-layer sandwich for firefighter's turnout gear. Aravis-120 FR-liner provides comfort for the wearer as it thin and light (120 gsm). At the same time Aravis-120 transports perspiration away from skin. The blend of aramid and viscose fibers makes Aravis-120 very durable. It also gives high level of thermo protection, due to its inherent Flame Retardant properties.

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# ARAVIS-120

AVAILABLE COLOURS:\*

MELANGE GREY

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

ORANGE #128-07

GREEN #128-03

YELLOW #128-11

\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
ARAVIS-120	50% Meta-Aramid, 50% FR-Viscose	—	120 gsm ±5%	FR-Plain 1/1	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	420 N	20 N	≤ 3%	—	—	—
WEFT	400 N	20 N	≤ 3%			




## COLOUR FASTNESS

		MELANGE GREY
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5
STAIN ON POLYESTER		4-5
STAIN ON COTTON		4
WET RUBBING	ISO 105 X12	4-5
DRY RUBBING	ISO 105 X12	4
LIGHT	ISO 105 B02	4



## ARTEX-210

93% M-ARAMID, 5% P-ARAMID,  
2% ANTISTATIC  
210 GSM, TWILL 2/1

		
EN 11612	EN 1149-5	EN 469
A1, A2, B1 C1, F1	EN 1149-3 method 2	

INHERENT, ANTISTATIC

### ARAMID FABRIC | INHERENT FR-CLOTHING

Artex-210 is an innovative inherent flame resistant fabric for protective and fr-clothing. This fabric is best used for emergency services (EMS clothing), for firefighters gear as well as for special forces, for marines uniform, for military pilots flight suits. Artex-210 is also suitable for FR bibs and FR overalls for workers in the oil and gas, chemical and power industries.

Artex-210 fabric provides protection against Fire, open Flame and Electric Arc. Inherent thermal protection cannot be washed away. The fabric is very durable and super resistant to abrasion.

Between other features of Artex-210 are light weight and good breathability, which gives extra comfort to the wearer. Due to integrated carbon antistatic yarn, Artex prevents building up electrostatic discharge (ESD) and eliminates the possibility of explosion in oil, gas and other industries.

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SCAN FOR  
DETAILS





# ARTEX-210

AVAILABLE COLOURS:\*

BLACK #X601

GREY #128-02

**DARK NAVY #X602**

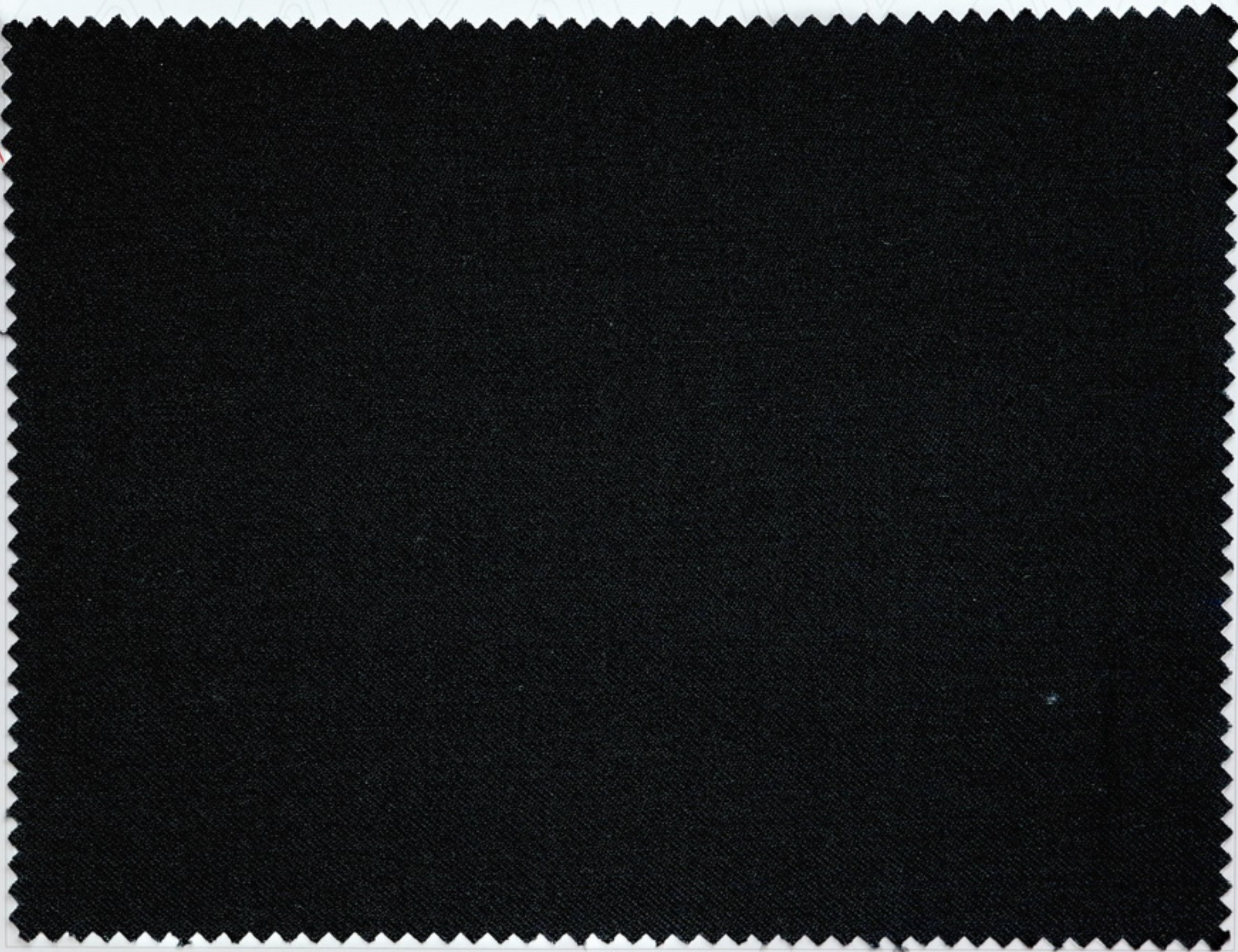
NAVY #X628

ROYAL BLUE #X604

RED #X603

GREEN #X609

ORANGE #X606



\* Actual colours of fabric may vary.  
This is due to the fact that colours on paper look different than colours on real fabric.

CARE INSTRUCTIONS:

Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
ARTEX-210	93% M-Aramid, 5% P-Aramid, 2% antistatic	Carbon (Belltron)	210 gsm ±5%	Twill 2 / 1	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	1400 N	50 N	≤ 3%	—	—	—
WEFT	1500 N	49 N	≤ 3%			

COLOUR FASTNESS		LIGHT	MID	DARK	
		Orange, Red, Yellow	Green, Grey	Dark Navy, Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4
STAIN ON POLYESTER		4-5	4-5	4-5	4
STAIN ON COTTON		4	4-5	4-5	3-4
WET RUBBING	ISO 105 X12	3	3	3	2-3
DRY RUBBING	ISO 105 X12	4	4	4	4
LIGHT	ISO 105 B02	3	3-4	4	4



## MURANO-250

60% MODACRYLIC, 35% COTTON,  
4% NYLON, 1% AS,  
250 GSM, RIP-STOP

				
EN 11612	EN 11611	EN 1149-5	EN 13034	EN 61482-1
A1, A2, B1, C1, E1, F1	Class 1	EN 1149-3 method 2		6,9 cal/cm²

INHERENT, ANTISTATIC

### MODACRYLIC | MACHINE BUILDING

Murano-250 is a modacrylic fabric for fr-clothing. Made with modacrylic-cotton blend it has inherently flame retardant composition. It also includes nylon for more durability and antistatic fibers to avoid static electricity. Murano-250 is a very comfortable and versatile fr-fabric for long lasting protective performance.

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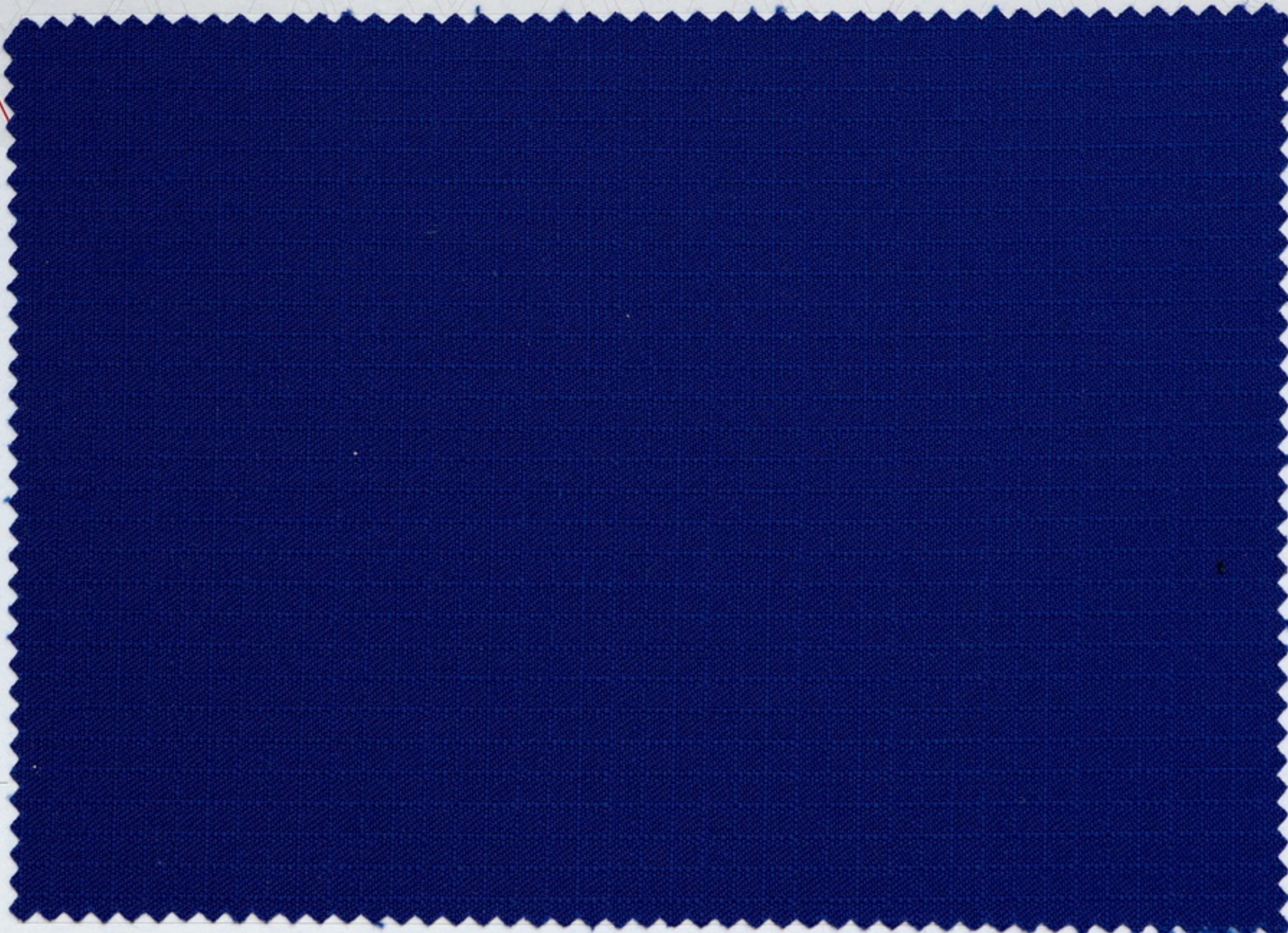
SCAN FOR  
DETAILS





# MURANO-250

AVAILABLE COLOURS:\*



\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
MURANO-250	60% Modacrylic, 35% Cotton, 4% nylon, 1% Antistatic	Carbon (Belltron)	250 gsm $\pm$ 5%	Rip-Stop	150 cm	Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	780 N	54 N	$\leq$ 3%	21 000 rubs	4	
WEFT	600 N	36 N	$\leq$ 3%			

COLOUR FASTNESS		LIGHT	MID	DARK	
		Orange, Red, Yellow	Green, Grey	Dark Navy	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4
STAIN ON POLYESTER		4-5	4-5	4-5	4
STAIN ON COTTON		4	4-5	4-5	3-4
WET RUBBING	ISO 105 X12	3	3	3	2-3
DRY RUBBING	ISO 105 X12	4	4	4	4
LIGHT	ISO 105 B02	3	3-4	4	4



## FR-FLEECE-280

60% MODACRYLIC, 39% COTTON,  
1% ANTISTATIC YARN,  
280 GSM, KNITTED

INHERENT, ANTISTATIC

### MODACRYLIC | WINTER FR-CLOTHING

FR-Fleece is designed to use the softness and warmth of Fleece fabric with adding some extra features such as Heat and Flame Resistance. We use 60% Modacrylic fibers and 39% Cotton together with 1% Antistatic carbon fibers to get our 280gsm FR-Fleece. The part of Modacrylic fibers interwoven with Cotton provides to the the whole fabric its flame resistance. FR-Fleece can be used as a middle layer or warmer for winter fr-clothing.



EN 11612

A1, B1,  
C2, F1



EN 1149-5

EN 1149-3  
method 2



EN 20471

OUR PARTNERS



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SCAN FOR  
DETAILS





# FR-FLEECE-280

AVAILABLE COLOURS:\*



\* Actual colours of fabric may vary.  
This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry  
place, with no  
direct sunlight.



## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
FR-FLEECE-280	60% Modacrylic, 39% Cotton, 1% Antistatic yarn	Carbon (Belltron)	280 gsm $\pm$ 5%	Knitted	150 cm	Flame Retardant
	Bursting Resistance ISO 13938-1		Shrinkage ISO 5077 after 5 washes			
WARP	232 kPa		$\leq$ 5%			
WEFT						

COLOUR FASTNESS		LIGHT	MID	DARK	
		HiVizYellow	Green, Grey	Dark Navy	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		3-4	4	2-3	2-3
STAIN ON COTTON		4	4-5	4	3-4
WET RUBBING	ISO 105 X12	3-4	3-4	2-3	2-3
DRY RUBBING	ISO 105 X12	4-5	4-5	3	3-4
LIGHT	ISO 105 B02	3	3-4	3-4	4



## FR-JERSEY-200C

50x  
WASH\*

60% MODACRYLIC, 38% COTTON,  
2% ANTISTATIC YARN,  
200 GSM, KNITTED

INHERENT, ANTISTATIC

### MODACRYLIC FABRIC | THERMAL CLOTHING

Flame retardant fabric FR-Jersey-200C 60% Modacrylic, 38% Cotton, 2% AS 200gsm is used for fr base layer (FR underwear). This FR knitted fabric with antistatic properties helps to save body warmth and increase flame retardant and thermal protection while wearing under fr-clothing (fr-jacket and fr-pants).

(\*) Tested after 50 domestic washes at 40 °C



EN 11612

A1, A2, B1,  
C1, F1



EN 1149-5

EN 1149-3  
method 2



EN 61482-2

Class 1



EN 20471





# FR-JERSEY-200C

AVAILABLE COLOURS:\*



\* Actual colours of fabric may vary.  
This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

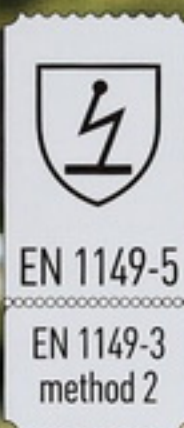
Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
FR-JERSEY-200C	60% Modacrylic, 38% Cotton, 2% Antistatic	Carbon (Belltron)	200 gsm ±5%	Knitted fabric	155 cm	Flame Retardant
	Bursting Resistance ISO 13938-1		Shrinkage ISO 5077 after 5 washes			
WARP	202 kPa		≤ 5%			
WEFT						

COLOUR FASTNESS		LIGHT	MID	DARK	
		HiViz Yellow	Green, Grey	Dark Navy	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		3-4	4	4-5	3
STAIN ON COTTON		4	4-5	4-5	3-4
WET RUBBING	ISO 105 X12	3-4	3-4	3	3
DRY RUBBING	ISO 105 X12	4-5	4-5	4-5	3-4
LIGHT	ISO 105 B02	3	3-4	4	4



## FR-PIQUE-230

60% MODACRYLIC  
38% COTTON, 2% AS  
230 GSM, KNITTED



INHERENT, ANTISTATIC

### MODACRYLIC | MACHINE BUILDING

The high level of demand for pique fabric is explained by excellent flame-resistant, moisture-regulating, antistatic properties. Pique perfectly holds its shape and is practical. Advantages: good creasing resistance, an excellent degree of wear resistance, the fabric has hygroscopicity, good breathability, easy to care for. Additionally, FR-Pique protects against industrial hazards such as arc flashover and static electricity.

(\*) Tested after 50 domestic washes at 40 °C





# FR-PIQUE-230

AVAILABLE COLOURS:\*

BLACK #128-01

GREY #128-02

DARK NAVY #124-01

RED #128-06

ROYAL BLUE #128-04

ORANGE #128-07

GREEN #128-03

YELLOW HI-VIZ

\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
FR-PIQUE-230	60% Modacrylic, 38% Cotton, 2% Antistatic	Carbon (Belltron)	230 gsm ±5%	Knitted Fabric	165 cm	Flame Retardant
	Bursting Resistance ISO 13938-1		Shrinkage ISO 5077 after 5 washes			
WARP	190 kPa		≤ 5%			
WEFT						

## COLOUR FASTNESS

		LIGHT	MID	DARK	
		HiViz Yellow	Green, Grey	Dark Navy	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		3-4	4	2-3	4
STAIN ON COTTON		4	4-5	4	4
WET RUBBING	ISO 105 X12	3-4	3-4	2-3	2-3
DRY RUBBING	ISO 105 X12	4-5	4-5	3	4
LIGHT	ISO 105 B02	3	3-4	3-4	4








## FR-OXFORD-250

98% POLYESTER, 2% ANTISTATIC YARN,  
250 GSM, PLAIN 1/1

FLAME RETARDANT, ANTISTATIC,  
OIL & WATER REPELLENT, BREATHABLE

### POLYESTER FABRIC | FR-RAINWEAR

FR-Oxford is a water resistant outerwear fabric with flame retardant properties. Additionally it has antistatic, water, oil and stain resistant properties. Flame Retardant PU (Polyurethane) lamination provides superior rain protection and breathability. The fabric is designed for flame retardant winter workwear, rain jackets for jobs where multi-norm protection is needed. Besides regular colours FR-Oxford is available in Hi-Viz orange and yellow.

				
EN 14116	EN 1149-5	EN 343	EN 13034	EN 20471
Index 1	EN 1149-3 method 2	Class 3		





# FR-OXFORD-250

AVAILABLE COLOURS:\*



\* Actual colours of fabric may vary.

This is due to the fact that colours on paper look different than colours on real fabric.

## CARE INSTRUCTIONS:



Keep in cool dry place, with no direct sunlight.

## SPECIFICATION

Article	Composition	Antistatic	Weight	Weave	Usable width	Finishes
FR-OXFORD-250	98% Polyester, 2% Antistatic yarn	Carbon (Belltron)	250 gsm $\pm$ 5%	Plain 1 / 1	150 cm	(PU) Flame Retardant
	Tensile str. ISO 13934-1	Tearing str. ISO 13937-2	Shrinkage ISO 5077 after 5 washes		Abrasion Resist. ISO 12947-2	Pilling Resist. ISO 12945-2
WARP	1300 N	100 N	$\leq$ 3%		20 000 rubs	4-5
WEFT	1200 N	84 N	$\leq$ 3%			

## COLOUR FASTNESS

COLOUR FASTNESS		LIGHT	MID	DARK	
		Orange, Red, Yellow	Green, Grey	Dark Navy, Navy, Royal Blue	Black
COLOUR CHANGE	WASHING 60°C ISO 105 C06	4-5	4-5	4-5	4-5
STAIN ON POLYESTER		3-4	4	3-4	3-4
STAIN ON COTTON		4	4-5	4-5	4-5
WET RUBBING	ISO 105 X12	3-4	3-4	2-3	2-3
DRY RUBBING	ISO 105 X12	4-5	4-5	4	4
LIGHT	ISO 105 B02	3	3-4	4	4



# FABRIC SWATCH CARD



Black #128-01



Grey #128-02



Dark Navy #128-01



Royal Blue #128-04



Green #128-08



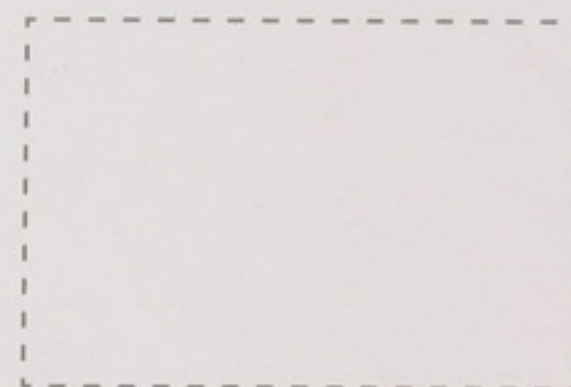
Red #128-06



Orange #128-07



Yellow HI-VIZ #128-08



OUR PARTNERS







FLAME RETARDANT  
for FR-CLOTHING

*Fabric*

MADE TO LAST  
50 x 75°C WASH



EN 11612



aitex®  
textile research institute







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