FLAME RESISTANT

INNOVATIVE FABRICS OFFERING
MAXIMUM PROTECTION

This industry leading flame resistant range provides multi standard protection for hazardous environments. These state of the art products are the result of years of experience combined with advanced technology and market research. Commitment to the health, safety and comfort of the wearer can be seen in the wide range of products suitable for all climates and end uses.

ANTI-STATIC ARAFLAME FLAME RESISTANT

INHERENTLY FLAME RESISTANT

Araflame™ is an inherent flame resistant fabric, made from Aramid fibres. It is extremely flame resistant, lightweight, offers high tensile strength and full anti static protection.

ANTI-STATIC MODAFLAME FLAME RESISTANT

INHERENTLY FLAME RESISTANT

Modacrylic fibres provide inherent flame resistance and excellent dimensional stability. This low-density fabric offers exceptional flame-resistant properties whilst being light and comfortable to wear. High cotton content adds warmth, comfort and a soft handle. Carbon fibre woven into the fabric gives inherent anti-static properties

ANTI-STATIC BIZFLAME FLAME-RESISTANT

Bizflame™ has a proprietary flame resistant finish which, when applied to fabric, gives excellent flame resistance. All of the Bizflame fabrics use the highest quality raw materials, ensuring the perfect balance of comfort and strength.

BIZWELD FLAME-RESISTANT

Bizweld™ 100% cotton 330g fabric is completely flame resistant. All Bizweld garments offer excellent flame and molten splash protection for welding, foundries and allied industries.

SEALTEX FLAME

Sealtex™ Flame fabric is constructed from a flame resistant, PU coated, polyester fabric 260g. Lightweight and durable Sealtex Flame is designed to offer full protection against adverse weather conditions and flame hazards.

ARAFLAME™

ULTIMATE INHERENT FLAME PROTECTION

ANTI-STATIC ARAFLAME™ FLAME RESISTANT PLUS

ANTI-STATIC ARAFLAME™ FLAME RESISTANT HI VIS MULTI

EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 ASTM F1959

Araflame Plus 150g, 260g

Constructed from 93% Meta-aramid which provides outstanding heat and flame resistance combined with 5% Para-aramid for strength. Araflame Plus is inherently anti static by incorporating 2% carbon fibre.

Araflame Plus is an inherently flame resistant fabric developed for excellence, using innovative technology. The FR properties are permanent and will not diminish with washing.

- Flame Resistant certification and standards exceed international safety standards for flame, electric arc and welding protection (EN ISO 11612, EC 61482-2, ASTM F1959 & EN ISO 11611).
- Inherently Flame Resistant Araflame guaranteed to hold its flame resistant properties indefinitely after multiple washes.
- Extremely robust Araflame will not ignite, melt or shrink when exposed to heat.
- Anti static properties exceeding EN1149-5.
- Exceptional tensile strength ensures the fabric can withstand the most challenging work environments.
- Preshrunk and colour fastness, this fabric has high shrink resistance and won't lose its colour after multiple washes.
- Outstanding results for burn injury prediction when tested to the optional test ISO 13506 under EN ISO 11612.

MODA FLAME™

PREMIUM INHERENT FLAME PROTECTION

ANTI-STATIC MODA FLAME™ FLAME RESISTANT WOVEN

EN ISO 11612 · EN ISO 11611 · EN 1149 · EN 13034 · IEC 61482-2 · ASTM F1959/ F1959M-12

Inherently Flame Resistant Modaflame 280g

Modaflame is an inherently flame resistant fabric. This high specification fabric is constructed from an inherently flame resistant yarn, composed of a special blend of 60% modacrylic fibre, 39% cotton and 1% carbon fibre.

ANTI-STATIC MODA FLAME™ FLAME RESISTANT KNIT

EN ISO 11612 · EN 1149 · IEC 61482-2 · ASTM F1959/ F1959M-12

Modaflame Knit 200g, 280g, 300g

Constructed from an inherently fire resistant yarn of 60% modacrylic, 39% cotton and 1% carbon fibre. Tested to exceed the required EN Standards, the Modaflame Knit range is strong, durable and highly innovative.

ANTI-STATIC MODA FLAME™ FLAME RESISTANT HI-VIS

EN ISO 11612 · EN ISO 11611 · EN 1149 · IEC 61482-2 · EN ISO 20471 · EN 13034* · ASTM F1959/ F1959M-12

*Woven Only

High Visibility Modaflame 210g, 280g, 300g

Available in both woven and knit fabrics to EN ISO 20471 standard. Constructed from an inherently fire resistant yarn of 60% modacrylic, 39% cotton and 1% carbon fibre.

ANTI-STATIC MODA FLAME™ FLAME RESISTANT HVO

EN ISO 11612 · EN ISO 11611 · EN 1149 · EN 13034 · IEC 61482-2 · EN ISO 20471 · RIS 3279

Hi-Vis Orange Modaflame HVO Woven 300g

Constructed from 61% modacrylic, 18% viscose, 15% polyester, 5% aramid, 1% carbon fibre, Modaflame HVO woven uses advanced technology to provide protection in a multi-risk environment.

ANTI-STATIC MODA FLAME™ FLAME RESISTANT HVO KNIT

EN ISO 11612 · EN 1149 · IEC 61482-2 · EN ISO 20471 · RIS 3279

Modaflame HVO Knit 220g, 300g

Modaflame HVO Knit provides inherent flame resistance, high visibility and anti static protection. The high performance fibres are blended without any chemical treatment giving Modaflame HVO Knit it's unparalleled soft, natural touch and appearance.

ANTI-STATIC MODA FLAME™ FLAME RESISTANT RAIN

EN ISO 11612 · EN ISO 11611 · EN 1149 · EN 13034 · EN 343 · IEC 61482-2 · EN ISO 20471 · RIS 3279

Modaflame Rain 350g

Constructed from 98% Polyester, 2% Carbon Fibre with a PU breathable flame resistant coating, bonded with a 60% Modacrylic, 40% Cotton flame resistant knitted backing, total weight 350g. The fabric offers great flame, chemical, electric arc and waterproof protection whilst ensuring high visibility day and night.

ANTI-STATIC MODA FLAME™ FLAME RESISTANT SOFT SHELL

EN ISO 11612 · EN ISO 11611 · EN 1149 · EN 13034 · IEC 61482-2 · EN ISO 20471 · RIS 3279

Modaflame Softshell 350g

Constructed from 100% Polyester that is laminated to a TPU flame resistant membrane and bonded with a 60% Modacrylic, 39% Cotton and 1% Carbon Fibre inherent flame resistant fleece, total weight 350g. This multi norm 3 layer softshell fabric is the latest evolution offering excellent flame, chemical, electric arc and waterproof protection whilst ensuring high visibility day and night.

BIZFLAME™

PREMIUM FLAME RESISTANCE

ANTI-STATIC BIZFLAME FLAME-RESISTANT PLUS

EN ISO 11612 EN ISO 11611 EN 1149 EN 13034 IEC 61482-2 ASTM F1959/ F1959M-12

Flame Resistant Bizflame Plus

350g, 280g, 210g, 160g

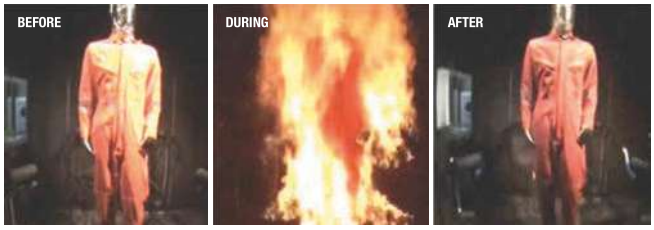
Bizflame™ has a proprietary flame resistant finish which, when applied to fabric, gives excellent flame resistance. All of the Bizflame fabrics use the highest quality raw materials, ensuring the perfect balance of comfort and strength.

- High ATPV on Bizflame Plus fabric.
- Outstanding results for burn injury prediction when tested to the optional test ISO 13506 under EN ISO 11612.
- Anti-Static carbon fibres provide built in anti-static properties exceeding EN1149-5 standard.
- Exceptional tensile strength ensures the fabric can withstand superior job-rated abrasion and tear resistance.
- High level of breathability and moisture wicking properties provides lasting comfort for the wearer.

BURN INJURY PREDICTION TESTING:

Testing Bizflame fabric (style FR50) to ISO 13506 at BTTG Fire Technology Services (four seconds).

Testing is carried out after exposure to flame engulfment for a period of four seconds on a fully clothed manikin with data collected for 60 seconds after the burn.



OTHER BIZFLAME FABRICS:

ANTI-STATIC BIZFLAME FLAME-RESISTANT PLUS — 99% COTTON, 1% CARBON FIBRE

ANTI-STATIC BIZFLAME FLAME-RESISTANT ULTRA — 80% COTTON, 19% POLYESTER, 1% CARBON FIBRE

BIZFLAME FLAME-RESISTANT 88/12 — 88% COTTON, 12% NYLON

BIZFLAME FLAME-RESISTANT KNIT — 100% COTTON

BIZFLAME FLAME-RESISTANT WORK — 100% POLYESTER, WARP KNITTED

ANTI-STATIC BIZFLAME FLAME-RESISTANT WORK — 98% POLYESTER 2% CARBON FIBRE, WARP KNITTED

ANTI-STATIC BIZFLAME FLAME-RESISTANT CHEMICAL RESISTANT MULTI — 80% COTTON, 19% POLYESTER, 1% ANTISTATIC CARBON FIBRE, TWO-LAYER PTFE LAMINATION, PU COATED, FLUOROCARBON FINISH

ANTI-STATIC BIZFLAME FLAME-RESISTANT RAIN — 98% POLYESTER, 2% ANTISTATIC CARBON FIBRE, BREATHABLE, PU COATED

ANTI-STATIC BIZFLAME FLAME-RESISTANT PRO — 99% COTTON, 1% CARBON FIBRE

BIZWELD™

MAXIMUM FLAME AND WELDING PROTECTION

BIZWELD™ FLAME-RESISTANT

EN ISO 11612 EN ISO 11611 ASTM F1959/ F1959M-12

Flame Resistant Bizweld

100% Cotton 330g

Bizweld is a proprietary, flame resistant, 100% high grade cotton fabric. This is a high technology fabric developed for maximum performance, comfort and durability.

Bizweld is made from 100% ringspun cotton yarns offering excellent pilling resistance while guaranteeing comfort, warmth and protection for the wearer. The finish applied to the fabric ensures it will hold its flame resistant protective properties for at least 50 washes (EN standards) and 100 washes (US standards).

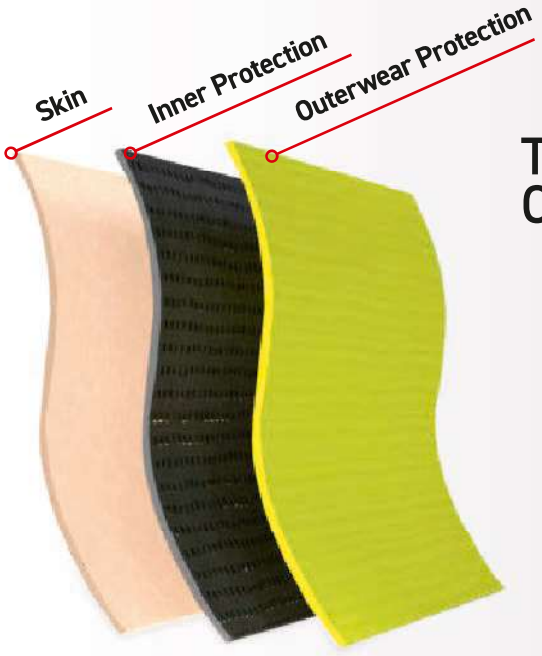
Bizweld fabric is independently tested & certified to exceed the international safety standards for flame and welding protection. This fabric is globally available and is worn with confidence by thousands of workers across the oil and gas, welding and allied industries.

- Outstanding flame-resistant performance exceeds international safety standards for flame & welding protection (EN ISO 11612 & EN ISO 11611).
- Provides exceptional protection against radiant, convective and contact heat as well as molten metal splashes.
- Provides 11.2 CAL/CM² electric arc protection.
- Provides a high level of protection against molten metal splashes. Ideal for welding and allied processes.
- Outstanding results for burn injury prediction when tested to the optional test ISO 13506 under EN ISO 11612.

OUTSTANDING
LAYERED FULL BODY PROTECTION

Portwest offers a complete range of flame resistant safety garments, which when layered together offer exceptional heat, flame and Arc protection.

Leading Range of **Multi Standard** Products



The Power Of Layering

Benefits of **Layering**

- Layering provides **increased performance and comfort.**
- Layering garments can also increase the **total arc protective ratings** to levels greater than the sum of individual arc ratings.
- Layering also allows for quick adjustments based on the **level of protection** needed for different tasks.

Mid Layer Protection
FR11

ELIM: 4.4 cal/cm²
ATPV: 5.5 cal/cm²

+

Outer Layer Protection
AF73

ELIM: 3.8 cal/cm²
ATPV: 4.5 cal/cm²

=

Combined Performance

ELIM	ATPV
19 Cal/Cm²	22.6 Cal/Cm²

Mid Layer Protection
FR77

ELIM: 4.4 cal/cm²
ATPV: 5.5 cal/cm²

+

Outer Layer Protection
MV25

ELIM: 6.4 cal/cm²
ATPV: 6.8 cal/cm²

=

Combined Performance

ELIM	ATPV
19 Cal/Cm²	21 Cal/Cm²

Mid Layer Protection
FR10

ELIM: 4.4 cal/cm²
ATPV: 5.5 cal/cm²

+

Outer Layer Protection
BIZ5

ELIM: 8.3 cal/cm²
ATPV: 10.9 cal/cm²

=

Combined Performance

ELIM	ATPV	EBT
30 Cal/Cm²	36 Cal/Cm²	40 Cal/Cm²

Mid Layer Protection
FR12

ELIM: 9.2 cal/cm²
ATPV: 15 cal/cm²

+

Outer Layer Protection
FR50

ELIM: 8.6 cal/cm²
ATPV: 9.8 cal/cm²

=

Combined Performance

ELIM	ATPV
45 Cal/Cm²	47 Cal/Cm²

Mid Layer Protection
FR89

ELIM: 9.1 cal/cm²
ATPV: 11 cal/cm²

+

Outer Layer Protection
MV72

ELIM: 11 cal/cm²
ATPV: 16 cal/cm²

=

Combined Performance

ELIM	ATPV
32 Cal/Cm²	38 Cal/Cm²

Mid Layer Protection
FR11

ELIM: 4.4 cal/cm²
ATPV: 5.5 cal/cm²

+

Outer Layer Protection
FR21

ELIM: 9 cal/cm2
ATPV: 9.7cal/cm2

=

Combined Performance

ELIM	ATPV	EBT
25 Cal/Cm²	27 Cal/Cm²	30 Cal/Cm²

Inner Layer Protection
FR96

ELIM: 8.2 cal/cm²
ATPV: 8.7 cal/cm²

+

Mid Layer Protection
MV72

ELIM: 11 cal/cm²
ATPV: 16 cal/cm²

+

Outer Layer Protection
MV70

ELIM: 32 cal/cm²
ATPV: 39 cal/cm²

=

Combined Performance

ELIM	ATPV
70 Cal/Cm²	87 Cal/Cm²

ARC RATING FOR SINGLE GARMENTS

INHERENTLY FLAME RESISTANT

BRAND	STYLE	DESCRIPTION	WEIGHT	PAGE	IEC 61482-2				NFPA70E	
					IEC 61482-1-1			IEC 61482-1-2	ASTM F1959	PPE CAT
					ELIM (cal/cm²)	ATPV (cal/cm²)	EBT (cal/cm²)	APC (Class 1 or 2)	ATPV (cal/cm²)	
Araflame Plus	AF53	Araflame Gold Coverall	150g	300	3.8	4.5			5.9	1
Araflame Plus	AF73	Araflame Silver Coverall	150g	301	3.8	4.5			5.9	1
Modaflame HVO Woven	MV35	Modaflame RIS Orange/Navy Jacket	300g	308	7	8		1	8.1	2
Modaflame HVO Woven	MV36	Modaflame RIS Orange/Navy Trouser	300g	308	7	8		1	8.1	2
Modaflame HVO Woven	MV91	Modaflame RIS Orange Coverall	300g	309	7	8		1	8.1	2
Modaflame HVO Woven	MV29	Modaflame RIS Navy/Orange Coverall	300g	309	7	8		1	8.1	2
Modaflame	FR602	WX3 FR Work Jacket	280g	313	6.4	6.8		1	8.4	2
Modaflame	FR402	WX3 FR Service Trouser	280g	313	6.4	6.8		1	8.4	2
Modaflame	FR503	WX3 FR Coverall	280g	314	6.4	6.8		1	8.4	2
Modaflame	MV25	Hi-Vis Modaflame Jacket	280g	310	6.4	6.8		1	8.4	2
Modaflame	MV26	Hi-Vis Modaflame Trouser	280g	310	6.4	6.8		1	8.4	2
Modaflame	MV46	Hi-Vis Modaflame Trouser	280g	311	6.4	6.8		1	8.4	2
Modaflame	MV28	Hi-Vis Modaflame Coverall	280g	311	6.4	6.8		1	8.4	2
Modaflame	MX28	Modaflame Coverall	280g	314	6.4	6.8		1	8.4	2
Modaflame HVO Knit	FR76	Flame Resistant RIS Polo Shirt	220g	315				1	6	1
Modaflame Knit	FR74	Flame Resistant Anti-Static Two Tone Polo Shirt	210g	318	4.4	5.5		1	4.3	1
Modaflame Knit	FR72	Flame Resistant Anti-Static Hi-Vis Sweatshirt	300g	319	9.2	15		1	16	2
Modaflame Knit	FR31	Flame Resistant Anti-Static Hi-Vis Fleece	280g	319	5.9		6.4	1		
Modaflame Knit	FR96	FR Hi-Vis Long Sleeve T-Shirt	280g	316	8.2	8.7		1	9	2
Modaflame Knit	FR77	Flame Resistant Anti-Static Hi-Vis Long Sleeve Polo Shirt	210g	316	4.4	5.5		1	4.3	1
Modaflame Knit	FR701	WX3 Flame Resistant Hi-Vis T-Shirt	210g	317	4.4	5.5			4.3	1
Modaflame Knit	FR702	WX3 Flame Resistant Hi-Vis Polo Shirt	210g	317	4.4	5.5			4.3	1
Modaflame Knit	FR11	Flame Resistant Anti-Static Long Sleeve T-Shirt	200g	322	4.4	5.5		1	4.3	1
Modaflame Knit	FR14	Flame Resistant Anti-Static Leggings	200g	322	4.4	5.5		1	4.3	1
Modaflame Knit	FR12	Flame Resistant Anti-Static Long Sleeve Sweatshirt	300g	320	9.2	15		1	16	2
Modaflame Knit	FR10	Flame Resistant Anti-Static Long Sleeve Polo Shirt	200g	320	4.4	5.5		1	4.3	1
Modaflame Knit	FR03	Flame Resistant Anti-Static Long Sleeve Polo Shirt with Reflective Tape	200g	320	4.4	5.5		1	4.3	1
Modaflame Knit	FR81	FR Zip Front Hooded Sweatshirt	300g	321	9.2	15		1	16	2
Modaflame Knit	FR30	Flame Resistant Anti Static Fleece	280g	321	5.9		6.4	1		
Modaflame Knit	FR18	Flame Resistant Anti-Static Balaclava	200g	323					4.3	1
Modaflame Knit	FR19	Flame Resistant Anti-Static Neck Tube	200g	323					4.3	1
Modaflame Knit	FR09	FR Anti-Static Balaclava	300g	323					16	2
Modaflame Knit	FR20	FR Anti-Static Balaclava Hood	300g	323					16	2
Modaflame Rain	MV70	Modaflame Rain Multi Norm Arc Jacket	350g	304	32	39		2		
Modaflame Rain	MV71	Modaflame Rain Multi Norm Arc Trouser	350g	305	32	39		2		
Modaflame Softshell	MV72	Modaflame Multi Norm Arc Softshell Jacket	350g	306	11	16		2		
Modaflame Softshell	MV73	Modaflame Softshell Jacket	350g	307	11	16		2		
Modaflame Softshell	FR704	WX3 FR Softshell	350g	312	11	16		2		

ARC RATING FOR SINGLE GARMENTS

TREATED FLAME RESISTANT

BRAND	STYLE	DESCRIPTION	WEIGHT	PAGE	IEC 61482-2				NFPA70E	
					IEC 61482-1-1			IEC 61482-1-2	ASTM F1959	PPE CAT
					ELIM (cal/cm²)	ATPV (cal/cm²)	EBT (cal/cm²)	APC (Class 1 or 2)	ATPV (cal/cm²)	
Bizflame 88/12	FR89	Bizflame 88/12 FR Shirt	237g	361	9.1	11			8.2	2
Bizflame 88/12	FR95	Bizflame 88/12 FR Hi-Vis Shirt	237g	360					9	2
Bizflame Multi	FR61	Hi-Vis Multi-Norm Jacket	345g	335	13	14		1	13.6	2
Bizflame Multi	FR62	Hi-Vis Multi-Norm Trousers	345g	335	13	14		1	13.6	2
Bizflame Multi	FR60	Hi-Vis Multi-Norm Coverall	345g	336	13	14		1	13.6	2
Bizflame Multi	FR63	Hi-Vis Multi-Norm Bib and Brace	345g	337	13	14		1	13.6	2
Bizflame Multi	FR80	Multi-Norm Coverall	345g	337	13	14		1	13.6	2
Bizflame Multi Rain	FR78	Bizflame Multi Arc Hi-Vis Trouser	380g	334	43	55		1		
Bizflame Multi Rain	FR79	Bizflame Multi Arc Hi-Vis Jacket	380g	334	43	55		1		
Bizflame Plus	FR501	Bizflame Plus Stretch Panelled Coverall	350g	347	8.6	9.8		1	13.6	2
Bizflame Plus	FR502	Bizflame Plus Lightweight Stretch Panelled Coverall	210g	347	9	9.7			9.1	2
Bizflame Plus	FR601	Bizflame Plus Lightweight Stretch Panelled Jacket	210g	346	9	9.7			9.1	2
Bizflame Plus	FR401	Bizflame Plus Lightweight Stretch Panelled Trouser	210g	346	9	9.7			9.1	2
Bizflame Plus	FR21	Flame Resistant Super Light Weight Anti-Static Coverall 210g	210g	351					9.1	2
Bizflame Plus	FR22	Insect Repellent Flame Resistant Coverall	210g	352					9.1	2
Bizflame Plus	FR34	FR Standard Coat	210g	353					9.1	2
Bizflame Plus	FF50	Aberdeen FR Coverall	350g	349	8.6	9.8		1	13.6	2
Bizflame Plus	FR50	Flame Resistant Anti-Static Coverall 350g	350g	348	8.6	9.8		1	13.6	2
Bizflame Plus	FR51	Bizflame Plus Women's Coverall 350g	350g	352	8.6	9.8		1	13.6	2
Bizflame Plus	FR55	Bizflame Plus Jacket	350g	356	8.6	9.8		1	13.6	2
Bizflame Plus	FR56	Bizflame Plus Trouser	350g	357	8.6	9.8		1	13.6	2
Bizflame Plus	FR57	Bizflame Plus Bib and Brace	350g	357	8.6	9.8		1	13.6	2
Bizflame Plus	FR25	Bizflame Plus Jacket	350g	354	8.6	9.8		1	13.6	2
Bizflame Plus	FR26	Bizflame Plus Trouser	350g	355	8.6	9.8		1	13.6	2
Bizflame Plus	FR27	Bizflame Plus Bib and Brace	350g	355	8.6	9.8		1	13.6	2
Bizflame Ultra	FR68	Bizflame Ultra Jacket	340g	344	11	13		1	16	2
Bizflame Ultra	FR66	Bizflame Ultra Trouser	340g	344	11	13		1	16	2
Bizflame Ultra	FR67	Bizflame Ultra Bib & Brace	340g	345	11	13		1	16	2
Bizflame Ultra	FR93	Bizflame Ultra Coverall	340g	345	11	13		1	16	2
Bizflame Ultra	FR08	Bizflame Ultra Two Tone Jacket	340g	342	11	13		1	16	2
Bizflame Ultra	FR06	Bizflame Ultra Two Tone Trouser	340g	343	11	13		1	16	2
Bizflame Ultra	FR07	Bizflame Ultra Two Tone Bib & Brace	340g	343	11	13		1	16	2
Bizflame Knit	FR32	FR Anti-Static Henley	237g	362	13	15			10	2
Bizflame Knit	FR33	FR Anti-Static Crew Neck	237g	362	13	15			10	2
Bizweld	BIZ1	Bizweld FR Coverall	330g	367	8.3	10.9			11.2	2
Bizweld	BIZ5	Bizweld Iona FR Coverall	330g	365	8.3	10.9			11.2	2
Bizweld	BIZ2	Bizweld Jacket	330g	366	8.3	10.9			11.2	2
Bizweld	BZ30	Bizweld Trousers	330g	366	8.3	10.9			11.2	2
Bizweld	BZ13	Bizweld Iona Jacket	330g	364	8.3	10.9			11.2	2
Bizweld	BZ14	Bizweld Iona Trouser	330g	364	8.3	10.9			11.2	2
Bizweld	BZ17	Bizweld Iona Bib & Brace	330g	365	8.3	10.9			11.2	2
Bizweld	BZ31	Bizweld FR Cargo Pant	330g	368	8.3	10.9			11.2	2
Bizweld	BIZ4	Bizweld Bib and Brace	330g	367	8.3	10.9			11.2	2
Bizweld	BIZ6	Bizweld Hooded Coverall	330g	369	8.3	10.9			11.2	2
Bizweld	BZ12	Bizweld Cape Hood	330g	369					11.2	2
Bizweld	BZ11	Bizweld Sleeves	330g	369					11.2	2

FLAME RESISTANT - EN STANDARDS

EN ISO 11612

EN ISO 11612: 2015
Protective Clothing Against Heat and Flame

The performance requirements set out in this international standard are applicable to garments, which could be worn for a wide range of end uses, where there is a need for clothing with
limited flame spread properties and where the user can be exposed to radiant, convective or contact heat or molten metal splashes.

This test uses standard methods and conditions to predict the performance of fabric/garments in the event of contact with heat or flames. Garment features such as seams, closures and logos must be tested as well as the fabric. Tests must be carried out on pre-treated components according to the manufacturers care label.

Specific testing is listed below:
Dimensional change
Limited flame spread (A1+A2)*
Convective heat (B) - 3 levels
Radiant heat (C) - 4 levels
Molten aluminium splash (D) – 3 levels
Molten iron splash (E) – 3 levels
Contact heat (F) – 3 levels (temperature 250 degrees Celsius)
Heat resistance at a temperature of 180 degrees Celsius.
Tensile strength (must meet a minimum of 300N)
Tear strength (must meet a minimum of 10N)
Bursting strength
Seam strength

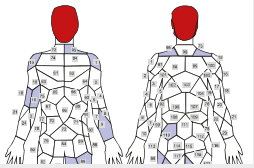
Garment design requires that coverage must be provided from the neck to the wrists and to the ankles.

Optional testing includes water vapour resistance and manikin testing for overall burn prediction.

*This test must be carried out on fabric and seams.

ISO 13506

ISO 13506: 2008
Manikin Test



Manikin test results for: FR61 & FR62

- Pain (16%),
- 1st° Burn (0%),
- 2nd° Burn (0%),
- 3rd° Burn (0%),

Burn Injury Prediction 0%,

This test method provides the general principles for evaluating the performance of complete garments or protective clothing ensembles in a flash fire or other short duration exposures.

Within the EN ISO 11612 standard, an optional test is available to provide predictions of burn injury using an instrumented, heat sensing, life size manikin, complying with the ISO13506 test method. Manikin testing creates a realistic simulation of a flash fire condition and analyses the response of manikin heat sensors to predict the potential tissue burn damage to the wearer of industrial clothing.

The effects of exposure to flame are dependent not only on the basic protective qualities of the fabric but on factors such as the quality of the garment fit and the presence of air gaps between the different layers of clothing. The presence of undergarments also has a significant effect on protection.
Testing is carried out by exposing a fully clothed manikin, to flame engulfment for a minimum period of four seconds.

The manikin is fitted with a minimum of 100 sensors positioned all over the body, arms, legs and head. The purpose of the sensors is to measure the variation in temperature on the manikin surface during a test with the manikin clothed – designed to replicate the rate at which human skin absorbs energy.

Heat energy absorbed by the sensors is recorded by the manikin's computer software, with data normally collected for up to 120 seconds after the burn. From the information gathered, a report is produced showing a "body map" indicating predicted body burn of either no burns, first, second or third degree burns and where they would have occurred.

There are no "Pass" or "Fail" criteria in the ISO13506 standard.

One of the most useful functions of these Manikin tests is to allow garments to be compared directly to each other under identical conditions. Comparisons can be made between different types of clothing fabrics, design, construction, finish, etc. to improve levels of protection and to see how different types and mixes of materials and layers / undergarments perform in the same environment.

EN ISO 11611

EN ISO 11611: 2015
Protective Clothing For Use In Welding And Allied Processes

This international standard specifies minimum basic safety requirements and test methods for protective clothing for use in welding and allied processes (excluding hand protection).
The international standard specifies two classes with specific performance requirements.

Class 1 is protection against less hazardous welding techniques and situations causing lower levels of spatter and radiant heat.

Class 2 is protection against more hazardous welding techniques and situations causing higher levels of spatter and radiant heat.

EN ISO 11611 requires that protective suits completely cover the upper and lower torso, neck, arms and legs. There are a number of other design requirements which must be followed, to prevent molten droplets lodging anywhere on the garment.

Testing must be carried out on pre-treated components according to the manufacturers care label.

The following is a summary of the testing required:
- Tensile strength (must meet a minimum of 400 N)
- Tear strength (must meet a minimum of 15N for class 1 and 20N for class 2)
- Bursting strength
- Seam strength
- Dimensional change
- Requirements of leather
- Limited flame spread (A1+A2)*
- Molten droplets
- Heat transfer (radiation)
- Electrical resistance

*This test must be carried out on fabric and seams.

EN ISO 14116

EN ISO 14116: 2015
Protective Clothing Against Limited Flame Spread Materials and Material Assemblies

This standard specifies the performance requirements for the limited flame spread properties of materials, material assemblies and protective clothing in order to reduce the possibility of the clothing burning and thereby itself constituting a hazard. Additional requirements for clothing are also specified.

Protective clothing complying with this standard is intended to protect workers against occasional and brief contact with small igniting flames in circumstances where there is no significant flame hazard and without the presence of another type of heat.

EN ISO 14116 has three different categories for flame spread, Index 1, 2 and 3 as detailed in the table below:

Note:
Index 1 garments should not be worn next to the skin. They must be worn over Index 2 or 3 garments.
Index 2 or 3 garments can be worn next to the skin.

Testing must be carried out on pre-treated components according to the manufacturers care label.

Testing required is as follows:
- Limited flame spread
- Tensile strength
- Tear strength
- Seam strength

INDEX	REQUIREMENTS
1	No flame spread
	No flaming debris
	No afterglow shall spread
2	No flame spread
	No flaming debris
	No afterglow shall spread
	No hole shall form
3	No flame spread
	No flaming debris
	No afterglow shall spread
	No hole shall form
	The afterflame must last no longer than 2 seconds

IEC 61482-2:2018 / EN 61482-2:2020
Protective Clothing Against the Thermal Hazards of an Electric Arc

The new updated version of IEC 61482-2:2018 has a new symbol, replacing the 2009 symbol.
During a transition period, stock garments will have mixed symbols

IEC 61482-2:2018 ELIM 6.4 cal/cm² APC 1

IEC 61482-2: 2009 CLASS 1 IEC 61482-1-1: 2009 Method A ATPV 8.4 cal/cm²

This standard specifies requirements and test methods applicable to materials and garments for protective clothing against the thermal effects of an electric arc event. An electric arc is a continuous electric discharge of high current between conductors generating very bright light and intensive heat.
Two international test methods have been developed to provide information on the resistance of clothing to the thermal effects of electric arcs. Each method gives different information. To comply with the standard either or both tests must be carried out.

Open Arc Method IEC 61482-1-1.
This test method aims to establish the ELIM (Incident Energy Limit) ATPV (Arc Thermal Performance Value) or EBT (Energy Breakopen Threshold) of a fabric. ELIM is a new value that was been added to the updated version of IEC 61482-1-1, the Open Arc test method. This value (cal/cm2) is the highest incident thermal energy to which the garment can be exposed with a 0% risk of the wearer getting a second-degree burn injury. The ELIM rating usually has a lower calorific value than ATPV and EBT . ATPV and EBT are measured against a 50% risk of the wearer getting a second-degree burn injury. An ATPV value or an EBT value is determined by how the fabric reacts to the arc test. If a hole appears first, the value is set as EBT and if high heat passage is first, it will be ATPV. Both ATPV and EBT are also expressed in calories per cm2. The higher the calorific value of the garment or fabric, then the greater the protection for the wearer. The Stoll Curve is used in testing along with a graph of heat flux exposure times. The point at which the heat flux cross the Stoll Curve is identified as the point at which a human would feel pain and be at risk of second-degree burns.

Box Test Method IEC 61482-1-2
During this test, fabric or garments are exposed to an electric arc, stimulating typical exposure conditions for a short circuit current, confined in a box for 0.5 seconds, resulting in either an APC 1 or APC 2 classification.

APC 1 & APC 2 (APC = Arc Protection Class) will replace Class 1 & Class 2 in the updated IEC 61482-1-2, Box test method. The values remain the same ie. APC 1 (formerly Class 1) is to a current of 4kA (400V, 168Kj) & APC 2 (formerly Class 2) is to a current of 7kA (400V, 320Kj)

Garments can be layered to achieve an overall ELIM, ATPV or EBT Rating. For example, a thermal layer may achieve an EBT of 4.3 Cal/m2, and an outer coverall may achieve an ELIM of 13.6 Cal/cm2. However, the combination EBT/ELIM ratings will be greater than the sum of the two single layers, as the air gap between the two layers affords the wearer additional protection.

ASTM F1959/F1959M-14 FABRIC ONLY TEST. This US Test Method determines the Arc Rating (ATPV or EBT) of a fabric or a multi-layer combination of fabrics. The test method is similar to IEC 61482-1-1. Pre-treatment may vary.

ARC RATED PPE	REQUIRED MINIMUM ARC RATING OF PPE/ CAL/CM2
1 ARC	*4 CAL/CM²*
2 ARC	*8 CAL/CM²*
3 ARC	*25 CAL/CM²*

EN 1149: 2018
Protective Clothing - Electrostatic Properties - Part 5. Material Performance and Design Requirements.

This European standard is part of a series of standards for test methods and requirements for electrostatic properties of protective clothing. The standard specifies material and design requirements for garments used as part of a total earthed system, to avoid incendiary discharges. The requirements may not be sufficient in oxygen enriched flammable atmospheres. This standard is not applicable for protection against mains voltages.

EN 1149 consists of the following parts

EN 1149-1: Test method for measurement of surface resistivity.
EN 1149-2: Test method for measurement of the electrical resistance through a material (vertical resistance)
EN 1149-3: Test methods for measurement of charge decay
EN 1149-4: Garment Test (under development)
EN 1149-5: Material performance and design requirements.

Electrostatic dissipative protective clothing shall be able to permanently cover all non-complying materials during normal use. Conductive parts (zippers, buttons etc) are permitted provided they are covered by the outermost material when in use.

EN 13034: 2005 + A1:2009
Protective Clothing Against Liquid Chemicals

Performance requirements for chemical protective clothing offering limited protective performance against liquid chemicals (Type 6 and Type PB [6] equipment). This standard specifies the minimum requirements for limited use and re-usable limited performance chemical protective clothing. Limited performance chemical protective clothing is intended for use in cases of a potential exposure to a light spray, liquid aerosols or low pressure, low volume splashes, against which a complete liquid permeation barrier (at a molecular level) is not required.

The standard covers both chemical protective suits (Type 6) and partial body protection (Type PB[6]).
Type 6 suits are tested using a mist or fine spray of water with a dye added to aid the assessment of leakage. The test subject wears an absorbent suit underneath the one to be tested, which absorbs any leaks and is stained by the dye. Success or failure is determined by measuring the total area of any stains on three suits and comparing this with the requirement. A range of other tests is specified, including resistance to abrasion, tear strength, tensile strength, resistance to puncture, resistance to ignition, resistance to penetration by liquid chemicals and seam strength. In the test for liquid chemical repellency and resistance to penetration by liquid chemicals, a bank of four test chemicals is given in the standard although the requirement is that the suit material demonstrates adequate repellency and resistance to penetration against just one chemical from this list
Protective clothing certified according to EN 13034 needs to be re-activated by heating the garment after each wash cycle and the garment must also be re-impregnated when necessary.
Portwest recommends reimpregnation using a professional launderer capable of carrying out this process.

ATEX Directive
The ATEX Directive defines what equipment is permitted in an environment where an explosive atmosphere may exist.
Portwest recommends using garments certified to EN 1149 for added protection in an ATEX environment.
Portwest garments have not been assessed under the ATEX directive which currently excludes PPE.

Important Notice: The garment Manufacturer Portwest, has been independently audited and our systems approved and certified to PPE Regulation (EU) 2016/425 Module D. Our scope is for the manufacture of flame resistant coveralls, jackets and trousers providing protection against heat and electrical risks.

FLAME RESISTANT - USA STANDARDS

NFPA 70E NFPA® 70E

This standard addresses electrical safety-related work practices for employee workplaces and requires employees working on or near energized parts and equipment to wear flame resistant clothing that meets the requirements of ASTM F1506.

The NFPA 70E standard provides table 130.7(C)(16) as a guideline for the selection of protective apparel. This table lists the requirements for PPE based on arc flash PPE categories 1 through 4. This clothing and equipment shall be used when working within the arc flash boundary.

The table ranges from ARC 1 (which is low risk) up to ARC 4 (which is high risk and requires FR clothing with a minimum arc rating of 40). The higher the ARC rating value, the greater the protection.

ARC RATED PPE	CLOTHING DESCRIPTION	REQUIRED MINIMUM ARC RATING OF PPE/CAL/CM2
1 ARC	1 ARC: Arc rated FR Shirt and FR pants or FR Coverall	*4*
2 ARC	2 ARC: Arc rated FR Shirt and FR pants or FR Coverall	*8*
3 ARC	3 ARC: Arc rated FR Shirt and FR pants or FR Coverall, and arc flash suit selected so that the system arc rating meets the required minimum	*25*
4 ARC	4 ARC: Arc rated FR Shirt and FR pants or FR Coverall and arc flash suit selected so that the system arc rating meets the required minimum	*40*

NFPA 2112 NFPA® 2112

This standard specifies the minimum performance requirements and test methods for flame resistant fabric and components and the design and certification requirements for garments for use in areas at risk from flash fires.

Flame resistant fabrics must pass a comprehensive list of thermal tests, including the following:

· ASTM F2700 – Heat Transfer Performance (HTP) Test

This test is a measure of the unsteady state heat transfer properties of garment materials.

· ASTM D6413 – Vertical Flammability (Flame Resistance) Test

This test is used to determine how easily fabrics ignite and continue to burn once ignited.

· Thermal Shrinkage Resistance Test

This test measures a fabrics resistance to shrinkage when exposed to heat.

· Heat Resistance Test

This test measures how fabrics and components react to the high heat that could occur during a flash fire.

· ASTM F1930-11 – Thermal Manikin Test

This test provides an overall evaluation of how the fabric performs in a standardized coverall design after three-second thermal exposure.

· FTMS 191A – Thread melting resistance

Thread used in flame resistant garments must withstand temperatures of up to 500°F.

ASTM F1506-10a ASTM® F1506

These textile materials must meet the following performance requirements:

- A general requirement that thread and components used in garment construction shall not contribute to the severity of injuries to the wearer in the event of a momentary electric arc and related thermal exposure.

- A set of minimum performance specifications for knit and woven fabrics including strength, colorfastness, flame resistance before and after washing and arc test results.

- Testing for flame resistance in accordance with ASTM Test Method D6413 vertical flame test.

- When tested as received in accordance with ASTM Test Method F1959 arc performance, the fabric may not have more than 5.0 seconds after flame time when tested.

Garments must be labelled with the following:

- Tracking code

- Statement that the garments meet the requirements of F1506

- Manufacturer's name, size information

- Care instructions and fiber content

- ARC rating (ATPV) or (EBT)

ASTM F1959/F1959M ASTM® F1959/F1959M

STANDARD TEST METHOD FOR DETERMINING THE ARC RATING OF MATERIALS FOR CLOTHING

FABRIC ONLY TEST. This test method determines the Arc Thermal Performance Value (ATPV) or Energy Breakdown Threshold (Ebt) of a fabric. The result (expressed in cal/cm2) represents the maximum incident thermal energy in units of energy per square area that a fabric can support before the wearer will suffer second degree burns.

LAUNDERING OF FR FABRICS

Flame Resistant fabrics need to be regularly washed and dried in order to remove any dirt and contamination. The quality of the laundry service is of high importance. Garments must be laundered according to the manufacturers instructions provided in the care label sewn into the garment, as incorrect laundering of flame resistant garments can seriously affect their performance and fit. The garment's flame resistant properties will last much longer if correctly laundered and washed.

WASHING / DRYING PROCEDURE:

Pre-treatment:
If stains are difficult to remove, they can be treated before putting into the washing machine with a liquid soap applied directly to stains and lightly rubbed. Heavier and stubborn stains should be pretreated with a commercial stain removal product at the earliest opportunity and sufficient time allowed for the pre-treatment to penetrate and loosen the stain.

Never use chlorine bleach or washing detergents containing bleach as these may discolour and will reduce the flame resistance properties of the fabric.

Fabric softeners, starches and other laundry additives are not recommended as they can mask the flame resistance performance and may also act as a fuel in case of combustion.

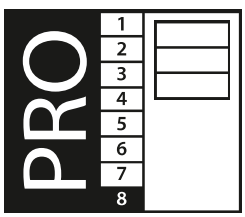
WASHING:

Always wash contaminated workwear separately, do not mix with non workwear. Flame Resistant fabric can usually be washed at high temperatures however it is the components (ie. the reflective tape, badging, etc.) on a finished garment that dictates the maximum washing temperature that the garment can be washed at. Always follow the washing temperature on the garment label. Always wash and dry garments inside out to minimise surface abrasion and help maintain the surface appearance of the fabric. Zips should be closed during washing.

LOAD SIZE: TO ENSURE A MORE EFFICIENT, CLEANER WASH, AVOID OVERLOADING THE MACHINE SO THE GARMENTS CAN MOVE FREELY THROUGH THE WASH AND RINSE CYCLES.

DRYING:

Tumble drying is not usually recommended as the temperature used is often too high and can cause garment shrinkage. It is vital that cotton or cotton mix garments are not over dried. Over drying is the main cause of excessive garment shrinkage. Do not hang in direct sunlight. This can cause fading.



INDUSTRIAL LAUNDERING:

Portwest have introduced a new Industrial Launderable Workwear Range – Bizflame Ultra. These products are labelled with a 'PRO' symbol and are suitable for industrial laundering according to ISO 15797.

ISO 15797 is the international standard specifying the industrial washing and finishing procedures that a product can withstand.

All Portwest industrial launderable products marked with the EN ISO 15797 label, are tested according to washing procedure 8, for coloured workwear, that can tolerate tunnel finishing.

THE FLAME RESISTANT FINISH IS RETAINED FOR THE NORMAL LIFE CYCLE OF THE GARMENT PROVIDED THAT THE CARE INSTRUCTIONS ARE ADHERED TO.

FLAME ENGULFMENT MANIKIN TEST

Portwest's technical flame resistant products have been tested to the highest international safety standards including **ISO 13506**, the **manikin flame** engulfment test.

In order to ensure even higher levels of safety for the user, the **manikin test subjects** the product to extreme conditions, proving that **Portwest flame resistant garments** offer the **highest protection** in the market.

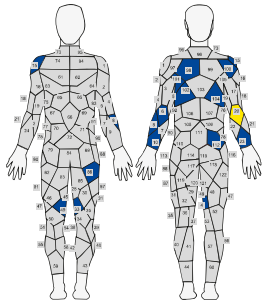
Portwest invests heavily in our ground breaking research and testing programme and work closely with notified bodies, such as **BTTG** and **AITEX**, who independently verify our results.

In the face of the most extreme conditions wearers can always rely on the unparalleled protection of Portwest's heat and flame resistant products.

CONFIDENCE | TRUST | RELIABILITY | PROTECTION | SAFETY

Understanding Manikin Test Results

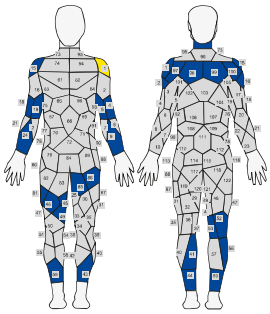
Following flame exposure, a body map is created, which uses colour coding to indicate the burn injury prediction results



FR50 & FF50

- Pain (12.3%)
- 1st° Burn (0.9%)
- 2nd° Burn (0.0%)
- 3rd° Burn (0.0%)

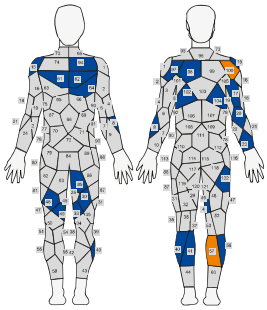
Burn Injury Prediction 0.0%



FR63 & FR61

- Pain (20.0%),
- 1st° Burn (1.0%)
- 2nd° Burn (0.0%)
- 3rd° Burn (0.0%)

Burn Injury Prediction 0.0%



FR28

- Pain (19.3%)
- 1st° Burn (0.0%)
- 2nd° Burn (1.8%)
- 3rd° Burn (0.0%)

Burn Injury Prediction 1.8%

Best in Class Burn Injury Prediction Results

Continuous investment in product testing is central to our product development approach as it offers reliable validation of our ongoing commitment to wearer comfort and safety.

TABLE OF RESULTS

	1st° Burn	2nd° Burn	3rd° Burn	Burn Injury Prediction
FR50/FF50	0.9%	0.0%	0.0%	0.0%
FR60	2.6%	0.9%	0.0%	0.9%
FR28	0.0%	1.8%	0.0%	1.8%
FR21	6.0%	19.0%	0.0%	19.0%
AF53/AF73	3.5%	7.0%	1.8%	8.8%
AF22	0.0%	5.3%	0.9%	6.2%
FR55/FR56	2.0%	3.0%	0.0%	3.0%
FR55/FR57	1.0%	0.0%	0.0%	0.0%
FR25/FR26	2.0%	3.0%	0.0%	3.0%
FR25/FR27	1.0%	0.0%	0.0%	0.0%
FR61/FR62	0.0%	0.0%	0.0%	0.0%
FR61/FR63	1.0%	0.0%	0.0%	0.0%
BIZ1	0.9%	1.8%	0.0%	1.8%
BIZ2 / BZ30	0.0%	4.4%	0.9%	5.3%

FABRIC REFERENCE CHART - INHERENTLY FLAME RESISTANT

INHERENTLY FLAME RESISTANT

BRAND	STYLE	PRODUCT DESCRIPTION	PAGE	FABRIC COMPOSITION	WEIGHT	FR TESTING AFTER WASHING
Araflame Plus	AF53, AF73	Coverall	300, 301	93% Meta-aramid, 5% Para-aramid, 2% Carbon Fibre	150gm	Inherent
Araflame Hi-Vis Multi	AF91	Coverall	303	57% Aramid, 42% Polyester, 1% Antistatic Carbon Fibre	260gm	Inherent
Modaflame	MV25, MV26, MV46, MV28	Jacket, Trouser, Coverall	310, 311	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	280gm	Inherent
Modaflame	MX28	Coverall	314	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	280gm	Inherent
Modaflame	FR602, FR402, FR503	Jacket, Trouser, Coverall	313, 314	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	280gm	Inherent
Modaflame HVO Woven	MV29, MV91	Coverall	309	61% Modacrylic, 18% Viscose, 15% Polyester, 5% Aramid, 1% Carbon Fibre	300gm	Inherent
Modaflame HVO Woven	MV35, MV36	Jacket, Trouser	308	61% Modacrylic, 18% Viscose, 15% Polyester, 5% Aramid, 1% Carbon Fibre	300gm	Inherent
Modaflame HVO Knit	FR76	Polo-Shirt	315	66% Modacrylic, 32% Polyester, 2% Carbon fibre	220gm	Inherent
Modaflame HVO Knit	FR703	Sweatshirt	315	45% Modacrylic, 25% Polyester, 23% Cotton, 6% Aramid, 1% Antistatic	300gm	Inherent
Modaflame Knit	FR74, FR77	Polo-Shirt	318, 316	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	210gm	Inherent
Modaflame Knit	FR701	T-Shirt	317	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	210gm	Inherent
Modaflame Knit	FR702	Polo-Shirt	317	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	210gm	Inherent
Modaflame Knit	FR30	Fleece	321	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	280gm	Inherent
Modaflame Knit	FR31	Hi-Vis Fleece	319	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	280gm	Inherent
Modaflame Knit	FR03, FR10	Polo-Shirt	320	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	200gm	Inherent
Modaflame Knit	FR11	T-Shirt	322	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	200gm	Inherent
Modaflame Knit	FR14	Leggings	322	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	200gm	Inherent
Modaflame Knit	FR18, FR19	Balaclava, Neck Tube	323	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	200gm	Inherent
Modaflame Knit	FR09, FR20	Balaclava	323	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	300gm	Inherent
Modaflame Knit	FR12	Sweatshirt	320	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	300gm	Inherent
Modaflame Knit	FR81	Hooded Sweatshirt	321	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	300gm	Inherent
Modaflame Knit	FR72	Sweatshirt	319	60% Modacrylic, 39% Cotton, 1% Carbon Fibre	300gm	Inherent
Modaflame Knit	FR96	T-Shirt	316	60% Modacrylic, 40% Cotton	280gm	Inherent
Modaflame Rain	MV70	Jacket	304	98% Polyester, 2% Carbon Fibre, PU Coated, 60% Modacrylic bonded to 40% Cotton FR knit backing	350gm	Inherent
Modaflame Rain	MV71	Trouser	305	98% Polyester, 2% Carbon Fibre, PU Coated, 60% Modacrylic bonded to 40% Cotton FR knit backing	350gm	Inherent
Modaflame Softshell	MV72	Jacket	306	100% Polyester 95g, TPU FR membrane 35g, 60% Modacrylic, 39% Cotton, 1% Carbon Fibre fleece 220g	350gm	Inherent
Modaflame Softshell	MV73, FR704	Softshell	307, 312	100% Polyester 95g, TPU FR membrane 35g, 60% Modacrylic, 39% Cotton, 1% Carbon Fibre fleece 220g	350gm	Inherent

EN 1149	EN ISO 11612	EN ISO 11611	EN ISO 20471	IEC 61482-2	EN 13034	EN 343	EN 15614	ASTM F1959	ASTM F1506	NFPA 2112	NFPA 70E
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FABRIC REFERENCE CHART - TREATED FLAME RESISTANT

TREATED FLAME RESISTANT

BRAND	STYLE	PRODUCT DESCRIPTION	PAGE	FABRIC COMPOSITION	WEIGHT	FR TESTING AFTER WASHING
Bizflame Pro	FR35, FR36	Jacket, Trouser	340	99% Cotton, 1% Carbon Fibre	330gm	50 Washes
Bizflame Pro	FR37, FR38	Bib & Brace, Coverall	341	99% Cotton, 1% Carbon Fibre	330gm	50 Washes
Bizflame Pro	FR90, BIZ7, FR92	Coverall, Trouser	338, 339	99% Cotton, 1% Carbon Fibre	330gm	50 Washes
Bizflame Multi	FR78, FR79	Jacket, Trouser	334	80% Cotton, 19% Polyester, 1% Antistatic Carbon Fibre, two-layer PTFE lamination, PU Coated, Fluorocarbon Finish	380gm	5 Washes
Bizflame Multi	FR80	Coverall	337	99% Cotton, 1% Carbon Fibre	345gm	50 Washes
Bizflame Multi	FR61, FR62	Jacket, Trouser	335	99% Cotton, 1% Carbon Fibre	345gm	50 Washes
Bizflame Multi	FR60, FR63	Coverall, Bib & Brace	336, 337	99% Cotton, 1% Carbon Fibre	345gm	50 Washes
Bizflame Plus	FR69	Shirt	360	99% Cotton, 1% Carbon Fibre	160gm	5 Washes
Bizflame Plus	FR25, FR26, FR27	Jacket, Trouser, Bib & Brace	354, 355	99% Cotton, 1% Carbon Fibre	350gm	50 Washes
Bizflame Plus	FR55, FR56, FR57	Jacket, Trouser, Bib & Brace	356, 357	99% Cotton, 1% Carbon Fibre	350gm	50 Washes
Bizflame Plus	FR50, FF50, FR51, FR501	Coverall	348, 349 352, 347	99% Cotton, 1% Carbon Fibre	350gm	50 Washes
Bizflame Plus	FR53, FR59, FR58	Coverall, Jacket, Salopettes	358, 359	99% Cotton, 1% Carbon Fibre	350gm	50 Washes
Bizflame Plus	FR28	Coverall	350	99% Cotton, 1% Carbon Fibre	280gm	50 Washes
Bizflame Plus	FR21, FR22	Coverall	351, 352	99% Cotton, 1% Carbon Fibre	210gm	50 Washes
Bizflame Plus	FR34	Lab Coat	353	99% Cotton, 1% Carbon Fibre	210gm	50 Washes
Bizflame Plus	FR502, FR601, FR401	Coverall, Jacket, Trouser	347, 346	99% Cotton, 1% Carbon Fibre	210gm	50 Washes
Bizflame Plus	FR29	FR Hood	353	99% Cotton, 1% Carbon Fibre	210gm	50 Washes
Bizflame 88/12	FR89	Shirt	361	88% Cotton, 12% Nylon	237gm	50 Washes (EU) 100 Washes (USA)
Bizflame 88/12	FR95	Shirt	360	88% Cotton, 12% Nylon	237gm	5 Washes (EU) 100 Washes (USA)
Bizflame Ultra	FR08, FR68, FR06, FR66, FR07, FR67, FR93	Jacket, Trouser,Bib & Brace, Coverall	342, 344 343, 345	80% Cotton, 19% Polyester, 1% Carbon Fibre	340g	50 Washes
Bizflame Knit	FR32, FR33	Henly & Crew	362	99% Cotton, 1% Carbon Fibre	237gm	50 Washes (EU) 100 Washes (USA)
Bizflame Work	FR75	Vest	363	100% Polyester, Warp Knitted	120gm	5 Washes
Bizflame Work Antistatic	FR71,FR85	Vest	363	98% Polyester 2% Carbon Fibre, Warp Knitted	120gm	12 Washes
Bizflame Rain	S778, S774, S779, S773	Jacket	324, 325	98% Polyester, 2% Carbon Fibre, PU Coated	250gm	12 Washes
Bizflame Rain	S780, S781, S782, S775	Trouser, Coverall	326, 327 328	98% Polyester, 2% Carbon Fibre, PU Coated	250gm	12 Washes
Bizflame Rain	S776	Bodywarmer	326	98% Polyester, 2% Carbon Fibre, PU Coated	250gm	12 Washes
Bizflame Rain	S770, S785, S783, S771	Jacket, Trouser	329, 330 331	98% Polyester, 2% Carbon Fibre, PU Coated	250gm	12 Washes
Bizflame Wildland Fire	FR98	Coverall	372	99% Cotton, 1% Carbon Fibre	280gm	5 Washes
Bizweld	BIZ1, BIZ5, BIZ6	Coverall	367, 365 369	100% Cotton, FR Finish	330gm	50 Washes
Bizweld	BIZ2, BZ13, BZ14, BZ30	Jacket, Trouser	364, 366	100% Cotton, FR Finish	330gm	50 Washes
Bizweld	BIZ4, BZ17	Bib & Brace	367, 365	100% Cotton, FR Finish	330gm	50 Washes
Bizweld	BZ11, BZ12	Sleeves, Hood	369	100% Cotton, FR Finish	330gm	50 Washes
Bizweld	BZ31	Trouser	368	100% Cotton, FR Finish	330gm	50 Washes
Safewelder	C030	Coverall	368	100% Cotton	330gm	50 Washes
Safewelder	SW10, SW20, SW31, SW32, SW33, SW34	Leather Jacket, Trouser, Accessories	371, 370	Split Cowhide Leather		N/A
Sealtex Flame	FR41, FR43	Jacket, Trouser	332	100% Polyester, FR & Antistatic, PU Coated	260gm	5 Washes
Sealtex Flame	FR46, FR47	Jacket, Trouser	333	100% Polyester, FR & Antistatic, PU Coated	240gm	5 Washes

EN 1149	EN ISO 11612	EN ISO 11611	EN ISO 20471	IEC 61482-2	EN 14116	EN 13034	EN 343	EN 15614	ASTM F1959	ASTM F1506	NFPA 2112	NFPA 70E
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ANTI-STATIC
ARAFLAME™ PLUS
FLAME RESISTANT

ELIM 3.8 Cal/Cm²

150g

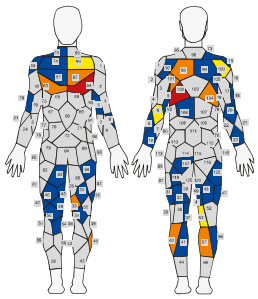
PREMIUM INHERENT FABRIC BLEND OF 93% META-ARAMID, 5% PARA-ARAMID AND 2% CARBON FIBRE

FABRIC INFORMATION

- Araflame Plus is an inherently flame resistant fabric developed for excellence, using innovative technology. The FR properties are permanent and will not diminish with washing.
- Constructed from 93% Meta-aramid which provides outstanding heat and flame resistance combined with 5% Para-aramid for strength. Araflame Plus is inherently anti static by incorporating 2% carbon fibre.
- Araflame Plus has been tested to the highest international standards and outperforms market leading brands in like for like comparison tests.

MANIKIN TEST RESULTS FOR: AF53

Burn Injury Prediction 8.8%



- Pain (28.9%),
- 1st° Burn (3.5%)
- 2nd° Burn (7.0%)
- 3rd° Burn (1.8%)

AF53

ARAFLAME GOLD COVERALL

EN ISO 11612 A1+A2, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 3.8CAL/CM²
ASTM F1959/F1959M-12 ATPV 5.9 CAL/CM² (HAF 63.1%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- Sleeve pocket
- Two back patch pockets
- Triple-stitched seams for extra durability
- Durable, strong and long lasting brass zips

Araflame Plus: 93% Meta-aramid, 5% Para-aramid, 2% Carbon Fibre, 150g
Navy, Orange

REG
36"-54"
36"-54"

CE CAT III

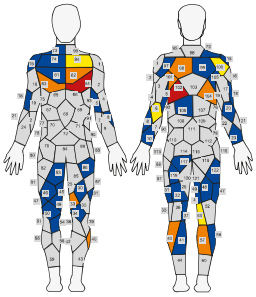
EN ISO 11612 EN 1149 IEC 61482-2 ASTM F1959/ F1959M-12

ANTI-STATIC
ARAFLAME™ PLUS
FLAME RESISTANT


Araflame garments have been tested for burn injury prediction in controlled conditions. Results are outstanding and give the wearer confidence in the garment's performance in "real life" flash fire emergency situations. Powerful, Proprietary, Inherently Flame Resistant Fabric

MANIKIN TEST RESULTS FOR: AF73

Burn Injury Prediction 8.8%



- Pain (28.9%),
- 1st° Burn (3.5%)
- 2nd° Burn (7.0%)
- 3rd° Burn (1.8%)

ELIM 3.8 Cal/Cm²

150g

AF73
ARAFLAME SILVER COVERALL

EN ISO 11612 A1+A2, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 3.8CAL/CM²
ASTM F1959/F1959M-12 ATPV 5.9 CAL/CM² (HAF 63.1%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- Two back patch pockets
- Triple-stitched seams for extra durability
- Durable, strong and long lasting brass zips
- Hook and loop cuffs for a secure fit

Araflame Plus: 93% Meta-aramid, 5% Para-aramid, 2% Carbon Fibre, 150g
Khaki, Navy, Orange, Red, Royal Blue

REG
34"-54"
34"-54"
34"-54"
36"-54"
34"-54"

AVAILABLE IN 5 COLOURS

CE CAT III
EN ISO 11612 EN 1149 IEC 61482-2 ASTM F1959/ F1959M-12


PS54 807
PS12 786
PS47 821
A780 697
AF91 303
LBG14 EXTRACTION STEAM DRAIN
LBG16
AA602

ANTI-STATIC
ARAFLAME™
FLAME RESISTANT
HI VIS
MULTI

260g

AWARD WINNING FABRIC INNOVATION

FABRIC INFORMATION

Araflame Hi-Vis Multi is a ground breaking innovation in flame resistant fabric. Constructed using 57% aramid, 42% polyester and 1% carbon fibre, Araflame Hi-Vis Multi offers the ultimate in inherent flame resistant protection combined with high visibility. This state of the art fabric offers full protection against a multiple of hazards.

GARMENT BENEFITS

- Inherently flame resistant
- Protects workers exposed to everyday hazards.
- This coverall has been developed specifically for those working in industries such as utilities, rail and aerospace.
- Retains excellent light and colour fastness.
- The fabric is breathable and comfortable.

12

UK CA

CE

FR.IW

40+ UPF

6

AF91

ARAFLAME HI-VIS MULTI COVERALL

EN ISO 11612 A1, B1, C1, F1
EN ISO 11611 CLASS 1 A1
EN 1149 -5
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- Rule pocket
- Side access pockets
- Durable, strong and long lasting brass zip
- Hook and loop cuffs for a secure fit

Araflame Hi-Vis Multi: 57% Aramid, 42% Polyester, 1% Antistatic Carbon Fibre, 260g

X **Orange S-5XL**

5XL

CE CAT III

EN ISO 11612 EN ISO 11611 EN 1149 EN ISO 20471 RIS 3279

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT

RAIN

FABRIC INFORMATION

Constructed from 98% Polyester, 2% Carbon Fibre with a PU breathable flame resistant coating, bonded with a 60% Modacrylic, 40% Cotton flame resistant knitted backing, total weight 350g. The fabric offers great flame, chemical, electric arc and waterproof protection whilst ensuring high visibility day and night.

LINED

ELIM 32 Cal/Cm²

520g

MV70

MODAFLAME RAIN MULTI NORM ARC JACKET

EN ISO 11612 A1, A2, B1, C1, E3, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-2 APC 2
IEC 61482-2 IEC 61482-1-1 ELIM 32 CAL/CM²
EN 13034 TYPE 6
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
EN 343 CLASS 3:1 X

- Protection against radiant, convective and contact heat
- Waterproof and breathable with taped seams to prevent water penetration
- Internal pockets for safe storage
- FR cotton lined for added warmth and comfort
- Pre-bent sleeves allow for increased freedom of movement
- Hook and loop cuffs for a secure fit

Modaflame Rain: 98% Polyester, 2% Carbon Fibre with a PU breathable flame resistant coating and bonded with a 60% Modacrylic, 40% Cotton flame resistant knitted backing, total weight, 350g

100% Cotton Flame Resistant Lining, 170g

Orange/Navy S-4XL, Yellow/Navy S-4XL

INTERACTIVE WITH:

4XL

CE CAT III

EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034 EN ISO 20471 EN 343 RIS 3279

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
RAIN

LINED

2-IN-1

ELIM 32 Cal/Cm²

520g

MV71

MODAFLAME RAIN MULTI NORM ARC TROUSER

EN ISO 11612 A1, A2, B1, C1, E3, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-2 APC 2
IEC 61482-2 IEC 61482-1-1 ELIM 32 CAL/CM²
EN 13034 TYPE 6
EN ISO 20471 CLASS 2
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
EN 343 CLASS 3:1 X

- Protection against radiant, convective and contact heat
- Lightweight, waterproof fabric with taped seams prevents water penetration
- Zip-off back turns this bib into a trouser for added versatility
- Adjustable hem to accommodate all leg lengths
- Adjustable straps with durable buckle closure
- Pre-bent knees allow for increased freedom of movement

Modaflame Rain: 98% Polyester, 2% Carbon Fibre with a PU breathable flame resistant coating and bonded with a 60% Modacrylic, 40% Cotton flame resistant knitted backing, total weight, 350g

100% Cotton Flame Resistant Lining, 170g

Orange/Navy S-3XL, Yellow/Navy S-3XL
Reg: 31" or 79cm adjustable to Tall 33" or 84cm

ZIP OFF FUNCTION AT THE BACK TURNS THIS INTO A TROUSER

CE CAT III
EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034 EN ISO 20471 EN 343 RIS 3279

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
SOFT SHELL

FABRIC INFORMATION

Constructed from 100% Polyester that is laminated to a TPU flame resistant membrane and bonded with a 60% Modacrylic, 39% Cotton and 1% Carbon Fibre inherent flame resistant fleece, total weight 350g. This multi norm 3 layer softshell fabric is the latest evolution offering excellent flame, chemical, electric arc and waterproof protection whilst ensuring high visibility day and night.

ELIM 11 Cal/Cm²

350g

MV72

MODAFLAME MULTI NORM ARC SOFTSHELL JACKET

EN ISO 11612 A1 B1 C2
EN ISO 11611 CLASS 2 A1
EN 1149 -5
IEC 61482-2 IEC 61482-1-2 APC 2
IEC 61482-2 IEC 61482-1-1 ELIM 11 CAL/CM²
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)

- Inherent flame resistant qualities will not diminish with washing
- Protects against radiant and convective heat
- Zipped pockets
- Drawcord adjustable hem
- Storm flap front to protect against the elements
- Hook and loop cuffs for a secure fit

Modaflame Softshell: 100% Polyester 95g laminated to a TPU flame resistant membrane 35g and bonded with a 60% Modacrylic, 39% Cotton and 1% Carbon Fibre inherent flame resistant fleece 220g, total weight, 350g

Orange/Navy S-4XL, Yellow/Navy S-4XL

INTERACTIVE WITH:

4XL

CE CAT III

EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034 EN ISO 20471 RIS 3279

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
SOFT SHELL

ELIM 11 Cal/Cm²

350g

NEW

MV73

MODAFLAME SOFTSHELL JACKET

EN ISO 11612 A1 B1 C2
EN ISO 11611 CLASS 2 A1
EN 1149 -5
IEC 61482-2 IEC 61482-1-2 APC 2
IEC 61482-2 IEC 61482-1-1 ELIM 11 CAL/CM²
EN 13034 TYPE PB [6]

- Inherent flame resistant qualities will not diminish with washing
- Protects against radiant and convective heat
- Zipped pockets
- Drawcord adjustable hem
- Storm flap front to protect against the elements
- Hook and loop cuffs for a secure fit

Modaflame Softshell: 100% Polyester 95g laminated to a TPU flame resistant membrane 35g and bonded with a 60% Modacrylic, 39% Cotton and 1% Carbon Fibre inherent flame resistant fleece 220g, total weight, 350g

Navy S-3XL

INTERACTIVE STYLE IDEAL FOR LAYERING

INTERACTIVE WITH:

CE CAT III

EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
HVO MULTI

FABRIC INFORMATION

Constructed from 61% modacrylic, 18% viscose, 15% polyester, 5% aramid, 1% carbon fibre, Modaflame HVO woven uses advanced technology to provide protection in a multi-risk environment. Inherently flame resistant and anti-static, this unique blend of fibres has highly effective moisture management properties and a comfortable handle. Certified to a range of standards including EN ISO 20471 Orange and RIS 3279, Modaflame HVO woven provides outstanding versatility and protection.

ELIM 7 Cal/Cm²

300g

ELIM 7 Cal/Cm²

300g

COMPLIES TO RIS 3279 FOR THE RAIL INDUSTRY

MV35

MODAFLAME RIS ORANGE/NAVY JACKET

EN ISO 11612 A1+A2, B1, C1, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 7 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE 6
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
ASTM F1959/F1959M-14E1 ATPV 8.1 CAL/CM² (HAF 73%)

Modaflame HVO Woven: 61% Modacrylic, 18% Viscose, 15% Polyester, 5% Aramid, 1% Carbon Fibre, 300g
Orange/Navy S-3XL
*Registered European Community Design

MV36

MODAFLAME RIS ORANGE/NAVY TROUSER

EN ISO 11612 A1+A2, B1, C1, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 7 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE 6
EN ISO 20471 CLASS 2
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
ASTM F1959/F1959M-14E1 ATPV 8.1 CAL/CM² (HAF 73%)

Modaflame HVO Woven: 61% Modacrylic, 18% Viscose, 15% Polyester, 5% Aramid, 1% Carbon Fibre, 300g
Orange/Navy S-XXL
*Registered European Community Design

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034 EN ISO 20471 RIS 3279 ASTM F1959/ F1959M-14E

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034 EN ISO 20471 RIS 3279 ASTM F1959/ F1959M-14E

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
HVO MULTI

ELIM 7 Cal/Cm²

300g

MV91

MODAFLAME RIS ORANGE COVERALL

EN ISO 11612 A1+A2, B1, C1, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 7 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE 6
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
ASTM F1959/F1959M-14E1 ATPV 8.1 CAL/CM² (HAF 73%)

Modaflame HVO Woven: 61% Modacrylic, 18% Viscose, 15% Polyester, 5% Aramid, 1% Carbon Fibre, 300g
Orange S-3XL
Registered European Community Design

ELIM 7 Cal/Cm²

300g

MV29

MODAFLAME RIS NAVY/ORANGE COVERALL

EN ISO 11612 A1+A2, B1, C1, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 7 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE 6
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
ASTM F1959/F1959M-14E1 ATPV 8.1 CAL/CM² (HAF 73%)

Modaflame HVO Woven: 61% Modacrylic, 18% Viscose, 15% Polyester, 5% Aramid, 1% Carbon Fibre, 300g
Orange/Navy S-3XL
Registered European Community Design

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | EN ISO 20471 | RIS 3279 | ASTM F1959/ F1959M-14E

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | EN ISO 20471 | RIS 3279 | ASTM F1959/ F1959M-14E

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT

FABRIC INFORMATION

Modacrylic fibres provide inherent flame resistance, excellent dimensional stability and high elastic properties which allow garments to retain their shape. High cotton content gives the fabric comfort, warmth and a soft handle. Carbon fibre woven into the fabric gives inherent anti static properties.

ELIM 6.4 Cal/Cm²

280g

MV26
HI-VIS MODAFLAME TROUSER

EN ISO 11612 A1+A2, B2, C1, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 6.4 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 1
ASTM F1959/F1959M-12 ATPV=8.4 CAL/CM² (HAF=75.8%)

Modaflame: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 280g
Yellow/Navy S-3XL, Yellow/Navy Tall M-XXL

ELIM 6.4 Cal/Cm²

280g

OPTIMUM PROTECTION IN MULTI-HAZARD ENVIRONMENTS

MV25
HI-VIS MODAFLAME JACKET

EN ISO 11612 A1+A2, B2, C1, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 6.4 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 2
ASTM F1959/F1959M-12 ATPV=8.4 CAL/CM² (HAF=75.8%)

Modaflame: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 280g
Yellow/Navy S-3XL

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | EN ISO 20471 | ASTM F1959/F1959M-12

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | EN ISO 20471 | ASTM F1959/F1959M-12

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT

ELIM 6.4 Cal/Cm²

280g

MV46
HI-VIS MODAFLAME TROUSER

EN ISO 11612 A1+A2, B2,C1,F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 6.4 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 2
ASTM F1959/F1959M-12 ATPV=8.4CAL/CM²(HAF=75.8%)

Modaflame: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 280g
Yellow/Navy S-3XL
Reg: 31" or 79cm adjustable to Tall 33" or 84cm

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | EN ISO 20471 | ASTM F1959/ F1959M-12

ELIM 6.4 Cal/Cm²

280g

MV28
HI-VIS MODAFLAME COVERALL

EN ISO 11612 A1+A2, B2, C1, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 6.4 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE 6
EN ISO 20471 CLASS 3
ASTM F1959/F1959M-12 ATPV=8.4 CAL/CM² (HAF=75.8%)

Modaflame: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 280g
Yellow/Navy S-5XL, Yellow/Navy Tall M-XXL

5XL

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | EN ISO 20471 | ASTM F1959/ F1959M-12

ANTI-STATIC

MODAFLAME™

FLAME RESISTANT

WX3 new inherent flame resistant products offer exceptional wear resistance, functionality, comfort and style. Made from Portwest's premium inherent flame-resistant Modaflame fabrics which guarantee maximum protection when working in the most challenging of environments. High performance stretch fabrics are used at key movement areas giving greater ease of movement and flexibility when working.

ELIM 11 Cal/Cm²

350g

NEW

WX3

FR704

WX3 FR SOFTSHELL

EN ISO 11612 A1 B1 C2
EN ISO 11611 CLASS 2 A1
EN 1149 -5
IEC 61482-2 IEC 61482-1-2 APC 2
IEC 61482-2 IEC 61482-1-1 ELIM 11 CAL/CM²
EN 13034 TYPE PB [6]

- Inherent flame resistant qualities will not diminish with washing
- Protects against radiant and convective heat
- Multiple utility pockets providing ample storage
- 100% metal free
- Heat applied segmented reflective tape for added visibility
- Contrast colouring for added style

Modaflame Softshell: 100% Polyester 95g laminated to a TPU flame resistant membrane 35g and bonded with a 60% Modacrylic, 39% Cotton and 1% Carbon Fibre inherent flame resistant fleece 220g, total weight, 350g

Black S-3XL

2x Stretch

PREMIUM INHERENT FLAME PROTECTION

CE CAT III

EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034

ANTI-STATIC

MODAFLAME™

FLAME RESISTANT

ELIM 6.4 Cal/Cm²

280g

NEW

ELIM 6.4 Cal/Cm²

280g

NEW

2x Stretch

WX3

FR602

WX3 FR WORK JACKET

EN ISO 11612 A1+A2, B2,C1,F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 6.4 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
ASTM F1959/F1959M-12 ATPV=8.4CAL/CM²(HAF=75.8%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- Multiple utility pockets providing ample storage
- Innovative stretch panelling in key movement areas provides excellent comfort and flexibility
- 100% metal free
- Heat applied segmented reflective tape for added visibility

Modaflame: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 280g
60% Modacrylic, 36% Cotton, 3% Elastane, 1% Carbon Fibre 280g
Black S-3XL

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | ASTM F1959/ F1959M-12

2x Stretch

WX3

REG: 31"(79CM) ADJUSTABLE TO 33"(84CM)			
INCH	CM	EU	FR
30-46	76-116	46-62	38-58

FR402

WX3 FR SERVICE TROUSER

EN ISO 11612 A1+A2, B2,C1,F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 6.4 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
ASTM F1959/F1959M-12 ATPV=8.4CAL/CM²(HAF=75.8%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- Multiple utility pockets providing ample storage
- Innovative stretch panelling in key movement areas provides excellent comfort and flexibility
- 100% metal free
- Heat applied segmented reflective tape for added visibility

Modaflame: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 280g
60% Modacrylic, 36% Cotton, 3% Elastane, 1% Carbon Fibre 280g
Black

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | ASTM F1959/ F1959M-12

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT

ELIM 6.4 Cal/Cm²

280g

NEW

FR503
GARMENT
FEATURES
SEE PAGE 77

2X Stretch

WX3

FR503
WX3 FR COVERALL

EN ISO 11612 A1+A2, B2,C1,F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 6.4 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE 6
ASTM F1959/F1959M-12 ATPV=8.4CAL/CM²(HAF=75.8%)

Modaflame: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 280g
60% Modacrylic, 36% Cotton, 3% Elastane, 1% Carbon Fibre 280g
Black S-3XL
Reg: 31" or 79cm adjustable to Tall 33" or 84cm

ELIM 6.4 Cal/Cm²

280g

MX28
MODAFLAME COVERALL

EN ISO 11612 A1+A2, B2, C1, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 6.4CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE 6
ASTM F1959/F1959M-12 ATPV=8.4 CAL/CM² (HAF=75.8%)

Modaflame: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 280g
Navy S-3XL, Orange S-4XL

4XL

CE CAT III — EN ISO 11612 — EN ISO 11611 — EN 1149 — IEC 61482-2 — EN 13034 — ASTM F1959/ F1959M-12

CE CAT III — EN ISO 11612 — EN ISO 11611 — EN 1149 — IEC 61482-2 — EN 13034 — ASTM F1959/ F1959M-12

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
HVO KNIT

FABRIC INFORMATION

The Modaflame HVO Knit range is strong, durable and highly innovative. This fabric has the ability to withstand heat and flame and protect against the danger caused by static electricity and flame. These inherent flame resistant properties will not diminish with repeated washing.

48 UKCA CE FR 40c UPF

FR76

FLAME RESISTANT RIS POLO SHIRT

EN ISO 11612 A1, B1, C1, F2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ATPV 6 CAL/CM² (HAF 71.7%)
IEC 61482-2 IEC 61482-1-2 CLASS 1
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)

- Inherent flame resistant qualities will not diminish with washing
- Contrast colouring for added style
- Ribbed cuffs for added comfort
- Button placket opening
- Side vents for added comfort
- 100% metal free

Modaflame HVO Knit: 66% Modacrylic, 32% Polyester, 2% Carbon fibre, 220g
Orange S-3XL

220g

RIS 3279

COMPLIES TO RIS 3279 FOR THE RAIL INDUSTRY

CE CAT III — EN ISO 11612 — EN 1149 — IEC 61482-2 — EN ISO 20471 — RIS 3279

24 UKCA CE FR 40c UPF

FR703

FLAME RESISTANT RIS SWEATSHIRT

EN ISO 11612 A1 B1 C1 F1
EN 1149 -5
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
ARC TESTING IN PROGRESS

- Inherent flame resistant qualities will not diminish with washing
- Knitted fabric with brushed backing
- Rib collar and cuffs
- Reflective tape for increased visibility
- External standards label for quick identification of protection levels
- Generous fit for wearer comfort

Modaflame HVO Knit: 45% Modacrylic, 25% Polyester, 23% Cotton, 6% Aramid, 1% Antistatic, 300g
Orange S-3XL

300g

NEW

CE CAT III — EN ISO 11612 — EN 1149 — IEC 61482-2 — EN ISO 20471 — RIS 3279

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
KNIT

FABRIC INFORMATION

Constructed from an inherently fire resistant yarn of 60% modacrylic, 39% cotton and 1% carbon fibre. Tested to exceed the required EN Standards, the Modaflame Knit range is strong, durable and highly innovative. This fabric has the ability to withstand heat and flame and protect against the danger caused by static electricity and flame. These inherent flame resistant properties will not diminish with repeated washing.

48 UKCA CE FR 40 UPF

FR77

FLAME RESISTANT ANTI-STATIC HI-VIS LONG SLEEVE POLO SHIRT

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 4.4CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN ISO 20471 CLASS 3
ASTM F1959/F1959M-12 EBT = 4.3 CAL/CM² (HAF = 66%)

ELIM 4.4 Cal/Cm²

210g

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- Flame resistant ribbed cuff for added safety
- Concealed button closure
- High cotton content for superior comfort
- Premium sew on flame resistant reflective tape

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 210g
Yellow S-4XL

4XL

CE CAT III — EN ISO 11612 — EN 1149 — IEC 61482-2 — EN ISO 20471 — ASTM F1959/ F1959M-12

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24 UKCA CE FR 40 UPF

FR96

FR HI-VIS LONG SLEEVE T-SHIRT

EN ISO 11612 A1+A2, B1, C1
EN ISO 11611 CLASS 1 A1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 8.2 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN ISO 20471 CLASS 3
ASTM F1959/F1959M-12 ATPV 9 CAL/CM² (HAF 80.8%)

ELIM 8.2 Cal/Cm²

280g

- Inherent flame resistant qualities will not diminish with washing
- Protects against radiant and convective heat
- High cotton content for superior comfort
- Crew neck
- Generous fit for wearer comfort
- Reflective tape for increased visibility

Modaflame Knit: 60% Modacrylic, 40% Cotton, 280g
Yellow S-3XL

CE CAT III — EN ISO 11612 — EN ISO 11611 — EN 1149 — IEC 61482-2 — EN ISO 20471 — ASTM F1959/ F1959M-12

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
KNIT

WX3

48 UK CA CE HS 40+ UPF

FR702
WX3 FLAME RESISTANT HI-VIS POLO SHIRT

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 4.4CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN ISO 20471 CLASS 3
ASTM F1959/F1959M-12 EBT = 4.3 CAL/CM2 (HAF = 66%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- High cotton content for superior comfort
- Concealed button closure
- Rib collar and cuffs
- Designed with a comfort fit

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 210g
Yellow/Black S-3XL, Yellow/Navy S-3XL

ELIM 4.4 Cal/Cm²

210g

CE CAT III — EN ISO 11612 — EN 1149 — IEC 61482-2 — EN ISO 20471 — ASTM F1959/ F1959M-12

WX3

48 UK CA CE HS 40+ UPF

FR701
WX3 FLAME RESISTANT HI-VIS T-SHIRT

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 4.4CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN ISO 20471 CLASS 3
ASTM F1959/F1959M-12 EBT = 4.3 CAL/CM2 (HAF = 66%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- Heat applied segmented reflective tape for added visibility
- Designed with a comfort fit
- Ribbed cuffs for added comfort
- Crew neck

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 210g
Yellow/Black S-3XL, Yellow/Navy S-3XL

ELIM 4.4 Cal/Cm²

210g

CE CAT III — EN ISO 11612 — EN 1149 — IEC 61482-2 — EN ISO 20471 — ASTM F1959/ F1959M-12

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
KNIT

ELIM 4.4 Cal/Cm²

210g

FR74

FLAME RESISTANT ANTI-STATIC TWO TONE POLO SHIRT

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 4.4 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN ISO 20471 CLASS 2
ASTM F1959/F1959M-12 EBT = 4.3 CAL/CM² (HAF = 66%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- High cotton content for superior comfort
- Ribbed cuffs for added comfort
- Concealed button closure
- Contrast colouring for added style

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 210g
Yellow/Navy S-4XL

4XL

CE CAT III

EN ISO 11612 EN 1149 IEC 61482-2 EN ISO 20471 ASTM F1959/ F1959M-12

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
KNIT

FR72
FLAME RESISTANT ANTI-STATIC HI-VIS SWEATSHIRT

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 9.2 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN ISO 20471 CLASS 3
ASTM F1959/F1959M-12 ATPV=16 CAL/CM² (HAF=86%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- Flame resistant ribbed cuff for added safety
- High cotton content for superior comfort
- Ribbed hem for a comfortable fit
- Premium sew on flame resistant reflective tape

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 300g
Yellow S-3XL

ELIM 9.2 Cal/Cm²

300g

CE CAT III — EN ISO 11612 · EN 1149 · IEC 61482-2 · EN ISO 20471 · ASTM F1959/F1959M-12

FR31
FLAME RESISTANT ANTI-STATIC HI-VIS FLEECE

EN ISO 11612 A1, B1, C2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 5.9CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN ISO 20471 CLASS 3

- Inherent flame resistant qualities will not diminish with washing
- Protects against radiant and convective heat
- Drawcord adjustable hem
- Elasticated cuffs for a secure fit
- Front zip opening for easy access
- Contrast fleece collar for protection against dirt

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 280g
Yellow S-3XL

ELIM 5.9 Cal/Cm²

280g

CE CAT III — EN ISO 11612 · EN 1149 · IEC 61482-2 · EN ISO 20471

FR03 FLAME RESISTANT ANTI-STATIC LONG SLEEVE POLO SHIRT WITH REFLECTIVE TAPE

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 4.4 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 EBT = 4.3 CAL/CM² (HAF = 66%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- Button front closure
- 100% metal free
- Ribbed cuffs for added comfort
- Lightweight and comfortable

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 200g
Navy S-3XL

ELIM 4.4 Cal/Cm²

200g

CE CAT III — EN ISO 11612 — EN 1149 — IEC 61482-2 — ASTM F1959/ F1959M-12

FR10 FLAME RESISTANT ANTI-STATIC LONG SLEEVE POLO SHIRT

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 4.4 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 EBT = 4.3 CAL/CM² (HAF = 66%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- High cotton content for superior comfort
- Button placket opening
- Ribbed cuffs for added comfort
- Ribbed collar

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 200g
Black S-3XL, Grey S-3XL, Navy XS-5XL

5XL

ELIM 4.4 Cal/Cm²

200g

CE CAT III — EN ISO 11612 — EN 1149 — IEC 61482-2 — ASTM F1959/ F1959M-12

FR12 FLAME RESISTANT ANTI-STATIC LONG SLEEVE SWEATSHIRT

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 9.2CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 ATPV=16 CAL/CM² (HAF=86%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- High cotton content for superior comfort
- Ribbed cuffs for added comfort
- Ribbed hem for a comfortable fit
- External standards label for quick identification of protection levels

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 300g
Navy XS-4XL

XS 4XL

ELIM 9.2 Cal/Cm²

300g

CE CAT III — EN ISO 11612 — EN 1149 — IEC 61482-2 — ASTM F1959/ F1959M-12

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
KNIT

FR81

FR ZIP FRONT HOODED SWEATSHIRT

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 9.2 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 ATPV 16 CAL/CM² (HAF 86%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- 2 pockets for secure storage
- High cotton content for superior comfort
- Grown on hood is stylish and practical
- Ribbed hem for a comfortable fit

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 300g
Navy S-5XL

ELIM 9.2 Cal/Cm²

300g

5XL

CE CAT III

EN ISO 11612 EN 1149 IEC 61482-2 ASTM F1959/ F1959M-12

FR30

FLAME RESISTANT ANTI STATIC FLEECE

EN ISO 11612 A1, B1, C2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 5.9 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1

- Inherent flame resistant qualities will not diminish with washing
- Protects against radiant and convective heat
- Front zip opening for easy access
- Drawcord adjustable hem
- Elasticated cuffs for a secure fit
- Zipped pockets

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 280g
Navy S-3XL

ELIM 5.9 Cal/Cm²

280g

FULLY COMPATIBLE WITH MV70, S770 AND S779 OUTER JACKETS

CE CAT III

EN ISO 11612 EN 1149 IEC 61482-2

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
KNIT

ELIM 4.4 Cal/Cm²

200g

FR14
FLAME RESISTANT ANTI-STATIC LEGGINGS

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 4.4 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 EBT = 4.3 CAL/CM² (HAF = 66%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- Fully elasticated waistband for ultimate wearer comfort
- Ribbed hem for a comfortable fit

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 200g
Navy S-4XL

4XL

CE CAT III | EN ISO 11612 | EN 1149 | IEC 61482-2 | ASTM F1959/ F1959M-12

ELIM 4.4 Cal/Cm²

200g

FR11
FLAME RESISTANT ANTI-STATIC LONG SLEEVE T-SHIRT

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 4.4 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 EBT = 4.3 CAL/CM² (HAF = 66%)

- Inherent flame resistant qualities will not diminish with washing
- Protection against radiant, convective and contact heat
- Flame resistant ribbed cuff for added safety
- High cotton content for superior comfort
- Ribbed cuffs for added comfort
- Outstanding colour fastness and shrinkage results

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 200g
Black S-3XL, Grey S-3XL, Navy XS-5XL

XS 5XL

CE CAT III | EN ISO 11612 | EN 1149 | IEC 61482-2 | ASTM F1959/ F1959M-12

ANTI-STATIC
MODAFLAME™
FLAME RESISTANT
KNIT

400g

100
10

FR18 FLAME RESISTANT ANTI-STATIC BALACLAVA

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
ASTM F1959/F1959M-12 EBT = 4.3 CAL/CM² (HAF = 66%)

X2

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre x 2 layer, 400g
Black One Size, Navy One Size

CE CAT III EN ISO 11612 EN 1149 ASTM F1959/ F1959M-12

400g

100
10

FR19 FLAME RESISTANT ANTI-STATIC NECK TUBE

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
ASTM F1959/F1959M-12 ATPV 4.3 CAL/CM² (HAF 66%)

X2

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre x 2 layer, 400g
Black One Size, Navy One Size

CE CAT III EN ISO 11612 EN 1149 ASTM F1959/ F1959M-12

300g

50
10

FR09 FR ANTI-STATIC BALACLAVA

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
ASTM F1959/F1959M-12 ATPV 16 CAL/CM² (HAF 86%)

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 300g
Navy One Size

CE CAT III EN ISO 11612 EN 1149 ASTM F1959/ F1959M-12

300g

50
10

FR20 FR ANTI-STATIC BALACLAVA HOOD

EN ISO 11612 A1, B1, C1, F1
EN 1149 -5
ASTM F1959/F1959M-12 ATPV=16 CAL/CM² (HAF=86%)

Modaflame Knit: 60% Modacrylic, 39% Cotton, 1% Carbon Fibre, 300g
Navy One Size

CE CAT III EN ISO 11612 EN 1149 ASTM F1959/ F1959M-12

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
RAIN

PADDED

570g

S778

BIZFLAME RAIN HI-VIS ANTISTATIC FR JACKET

EN ISO 14116 INDEX 3
EN 1149 -5
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
EN 343 CLASS 3:1 X
EN 14058 CLASS 3

- Flame resistant treated waterproof fabric prevents water penetration
- Fully lined and padded to trap the heat and increase warmth
- Internal chest pocket
- Storm flap front to protect against the elements
- Ribbed cuffs for added comfort
- Anti-static

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
100% Cotton Flame Resistant Lining, 170g
100% Modacrylic Flame Resistant, 150g
Orange XS-5XL, Yellow XS-6XL

XS 6XL

CE CAT III EN ISO 14116 | EN 1149 | EN 13034 | EN ISO 20471 | EN 343 | EN 14058 | RIS 3279

LINED

420g

S774

BIZFLAME RAIN HI-VIS MULTI LITE JACKET

EN ISO 14116 INDEX 3
EN 1149 -5
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
EN 343 CLASS 3:3 X

- Flame resistant treated waterproof fabric prevents water penetration
- Internal chest pocket
- Lightweight and comfortable
- FR cotton lined for added warmth and comfort
- Knitted cuff for comfort and warmth
- External standards label for quick identification of protection levels

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
100% Cotton Flame Resistant Lining, 170g
Orange S-3XL, Yellow S-3XL

CE CAT III EN ISO 14116 | EN 1149 | EN 13034 | EN ISO 20471 | EN 343 | RIS 3279

ANTI-STATIC
BIZFLAME
FLAME-RESISTANT
RAIN

INTERACTIVE WITH:


MV72 306


MV73 307


FR30 321

LINED

770g

S779
BIZFLAME RAIN HI-VIS MULTI-PROTECTION JACKET

EN ISO 14116 INDEX 3
EN 1149 -5
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
EN 343 CLASS 3:3 X

- Flame resistant treated waterproof fabric prevents water penetration
- Anti-static
- FR cotton lined for added warmth and comfort
- Fleece lining for added warmth and comfort

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
100% Cotton Flame Resistant Lining, 170g
Removable Flame Resistant Fleece Liner 350g
Orange/Navy S-3XL, Yellow/Navy XS-4XL

XS 4XL

CE CAT III EN ISO 14116 EN 1149 EN 13034 EN ISO 20471 EN 343 RIS 3279

PADDED

570g

S773
BIZFLAME RAIN HI-VIS ANTISTATIC FR BOMBER JACKET

EN ISO 14116 INDEX 3
EN 1149 -5
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
EN 343 CLASS 3:1 X

- Flame resistant treated waterproof fabric prevents water penetration
- Anti-static
- Internal chest pocket
- Ribbed cuffs for added comfort
- Fully lined and padded to trap the heat and increase warmth
- Premium sew on flame resistant reflective tape

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
100% Cotton Flame Resistant Lining, 170g
100% Modacrylic Flame Resistant, 150g
Orange XS-4XL, Yellow XS-5XL

XS 5XL

CE CAT III EN ISO 14116 EN 1149 EN 13034 EN ISO 20471 EN 343 RIS 3279

ANTI-STATIC
BIZFLAME
FLAME-RESISTANT
RAIN

PADDED

570g

250g

S776

BIZFLAME RAIN HI-VIS ANTISTATIC FR BODYWARMER

EN ISO 14116 INDEX 3
EN 1149 -5
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 2
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
100% Cotton Flame Resistant Lining, 170g
100% Modacrylic Flame Resistant, 150g
Orange S-3XL, Yellow S-3XL

S780

BIZFLAME RAIN UNLINED HI-VIS ANTISTATIC FR TROUSER

EN ISO 14116 INDEX 1
EN 1149 -5
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 1
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
EN 343 CLASS 3:3 X

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
Orange S-3XL, Yellow S-4XL

4XL

CE CAT III EN ISO 14116 EN 1149 EN 13034 EN ISO 20471 RIS 3279

CE CAT III EN ISO 14116 EN 1149 EN 13034 EN ISO 20471 EN 343 RIS 3279

LINED

ANTI-STATIC BIZFLAME FLAME-RESISTANT RAIN

420g

S781

BIZFLAME RAIN LINED HI-VIS ANTISTATIC FR TROUSER

EN ISO 14116 INDEX 3
EN 1149 -5
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 1
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
EN 343 CLASS 3:3 X

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
100% Cotton Flame Resistant Lining, 170g
Orange M-3XL, Yellow S-3XL

CE CAT III EN ISO 14116 EN 1149 EN 13034 EN ISO 20471 EN 343 RIS 3279

LINED

420g

S782

BIZFLAME RAIN HI-VIS MULTI-PROTECTION TROUSER

EN ISO 14116 INDEX 3
EN 1149 -5
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 2
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
EN 343 CLASS 3:3 X

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
100% Cotton Flame Resistant Lining, 170g
Orange/Navy M-XXL, Yellow/Navy M-XXL

CE CAT III EN ISO 14116 EN 1149 EN 13034 EN ISO 20471 EN 343 RIS 3279

ANTI-STATIC
BIZFLAME
FLAME-RESISTANT
RAIN

PADDED

570g

S775

BIZFLAME RAIN HI-VIS MULTI COVERALL

EN ISO 14116 INDEX 3
EN 1149 -5
EN 13034 TYPE 6
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)
EN 343 CLASS 3:1 X

- Flame resistant treated waterproof fabric prevents water penetration
- Multiple utility pockets providing ample storage
- Fully lined and padded to trap the heat and increase warmth
- Zipped ankles for easy fitting over work boots
- Storm flap front to protect against the elements
- Contrast panels for protection against dirt

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
100% Cotton Flame Resistant Lining, 170g
100% Modacrylic Flame Resistant, 150g
Orange/Navy S-3XL, Yellow/Navy S-3XL

HI-VIS, FLAME, CHEMICAL, ANTI-STATIC AND WATERPROOF PROTECTION COMBINED

CE CAT III
EN ISO 14116
EN 1149
EN 13034
EN ISO 20471
EN 343
RIS 3279

ANTI-STATIC
BIZFLAME
FLAME-RESISTANT
RAIN

LINED

770g

S770

BIZFLAME RAIN MULTI PROTECTION JACKET

EN ISO 14116 INDEX 3
EN 1149 -5
EN 13034 TYPE PB [6]
EN 343 CLASS 3:3 X

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
100% Cotton Flame Resistant Lining, 170g
Full Zip Around Removable Fleece Lining 350g
Navy S-3XL

INTERACTIVE WITH:

CE CAT III EN ISO 14116 EN 1149 EN 13034 EN 343

LINED

420g

S771

BIZFLAME RAIN FR MULTI-PROTECTION TROUSER

EN ISO 14116 INDEX 3
EN 1149 -5
EN 13034 TYPE PB [6]
EN 343 CLASS 3:3 X

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
100% Cotton Flame Resistant Lining, 170g
Navy S-4XL

4XL

CE CAT III EN ISO 14116 EN 1149 EN 13034 EN 343

ANTI-STATIC
BIZFLAME
FLAME-RESISTANT
RAIN

PADDED

570g

S785

BIZFLAME RAIN ANTI-STATIC FR JACKET

EN ISO 14116 INDEX 3
EN 1149 -5
EN 13034 TYPE PB [6]
EN 343 CLASS 3:1 X
EN 14058 CLASS 3

- Flame resistant treated waterproof fabric prevents water penetration
- Internal chest pocket
- Storm flap front to protect against the elements
- External standards label for quick identification of protection levels
- Ribbed cuffs for added comfort
- Fully lined and padded to trap the heat and increase warmth

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
100% Cotton Flame Resistant Lining, 170g
100% Modacrylic Flame Resistant, 150g
Navy S-3XL, Red S-3XL

BACK

CE CAT III
EN ISO 14116
EN 1149
EN 13034
EN 343
EN 14058

ANTI-STATIC
BIZFLAME
FLAME-RESISTANT
RAIN

PADDED

570g

S783

BIZFLAME RAIN FR MULTI PROTECTION BOMBER JACKET

EN ISO 14116 INDEX 3
EN 1149 -5
EN 13034 TYPE PB [6]
EN 343 CLASS 3:1 X

- Flame resistant treated waterproof fabric prevents water penetration
- Internal chest pocket
- Fully lined and padded to trap the heat and increase warmth
- Hook and loop cuffs for a secure fit
- Storm flap front to protect against the elements
- External standards label for quick identification of protection levels

Bizflame Rain: 98% Polyester, 2% Antistatic Carbon Fibre, Breathable, PU Coated, 250g
100% Cotton Flame Resistant Lining, 170g
100% Modacrylic Flame Resistant, 150g
Navy S-6XL

BACK

6XL

CE CAT III

EN ISO 14116 | EN 1149 | EN 13034 | EN 343

SEALTEX™ FLAME HI-VIS

FABRIC INFORMATION

Constructed from a flame resistant, PU coated, polyester fabric 260g, the lightweight and durable Sealtex Flame suit is designed to offer full protection against adverse weather conditions and flame hazards.

260g

260g

STRETCHY PU COATED FABRIC WITH WELDED SEAMS

FR41

SEALTEX FLAME HI-VIS JACKET

EN ISO 14116 INDEX 1
EN 1149 -5
EN 13034 TYPE 6
EN ISO 20471 CLASS 3
EN 343 CLASS 3:1 X

- Waterproof with welded seams to prevent water penetration
- Durable and stretchy with wipe clean finish
- Concealed stud and zip fastening
- Stud adjustable cuffs for a secure fit
- Heat applied flame resistant tape
- Hood for added protection against the elements

Sealtex Flame: 100% Polyester, FR & Antistatic, PU Coated, 260g
Orange S-3XL, Yellow XS-5XL

XS 5XL

CE CAT III EN ISO 14116 EN 1149 EN 13034 EN ISO 20471 EN 343

FR43

SEALTEX FLAME HI-VIS TROUSER

EN ISO 14116 INDEX 1
EN 1149 -5
EN 13034 TYPE 6
EN ISO 20471 CLASS 1
EN 343 CLASS 3:1 X

- Waterproof with welded seams to prevent water penetration
- Lightweight and comfortable
- Durable and stretchy with wipe clean finish
- Stud adjustable hems for a secure fit
- Heat applied flame resistant tape
- Fully elasticated waistband for ultimate wearer comfort

Sealtex Flame: 100% Polyester, FR & Antistatic, PU Coated, 260g
Orange S-3XL, Yellow S-5XL

5XL

CE CAT III EN ISO 14116 EN 1149 EN 13034 EN ISO 20471 EN 343

COMPLETE WATERPROOF PROTECTION - HIGH TECHNOLOGY FLEXIBLE FINISH

240g

FR46
SEALTEX FLAME JACKET

EN ISO 14116 INDEX 1
EN 1149-5
EN 13034 TYPE 6
EN 343 CLASS 3:1 X

- Waterproof with welded seams to prevent water penetration
- Durable and stretchy with wipe clean finish
- Concealed stud and zip fastening
- Stud adjustable cuffs for a secure fit
- Lightweight and comfortable
- 2 pockets for secure storage

Sealtex Flame: 100% Polyester, FR & Antistatic, PU Coated, 240g
Navy S-3XL

CE CAT III EN ISO 14116 EN 1149 EN 13034 EN 343

240g

FR47
SEALTEX FLAME TROUSER

EN ISO 14116 INDEX 1
EN 1149-5
EN 13034 TYPE 6
EN 343 CLASS 3:1 X

- Waterproof with welded seams to prevent water penetration
- Lightweight and comfortable
- Durable and stretchy with wipe clean finish
- Stud adjustable hems for a secure fit
- Drawcord adjustable waist for a comfortable fit
- Fully elasticated waistband for ultimate wearer comfort

Sealtex Flame: 100% Polyester, FR & Antistatic, PU Coated, 240g
Navy S-3XL

CE CAT III EN ISO 14116 EN 1149 EN 13034 EN 343

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
CHEMICAL RESISTANT
MULTI RAIN

FABRIC INFORMATION

Conforming to seven EN standards, this 80% cotton, 19% Polyester, 1% anti-static, two layer PTFE lamination, PU Coated, Fluorocarbon finish, 380 gm fabric combines long term protection with superior comfort and appearance.

ELIM 43 Cal/Cm²

LINED

550g

ELIM 43 Cal/Cm²

LINED

550g

MULTI-NORM HAZARD PROTECTION

FR79

BIZFLAME MULTI ARC HI-VIS JACKET

EN ISO 11612 A1, A2, B1, C1, E2
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 43 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE 6
EN ISO 20471 CLASS 3
EN 343 CLASS 3:3 X

Bizflame Multi Rain: 80% Cotton, 19% Polyester, 1% Antistatic Carbon Fibre, two-layer PTFE lamination, PU Coated, Fluorocarbon Finish, 380g
100% Cotton Flame Resistant Lining, 170g
Yellow/Navy M-XXL

FR78

BIZFLAME MULTI ARC HI-VIS TROUSER

EN ISO 11612 A1, A2, B1, C1, E2
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 43CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE 6
EN ISO 20471 CLASS 2
EN 343 CLASS 3:3 X

Bizflame Multi Rain: 80% Cotton, 19% Polyester, 1% Antistatic Carbon Fibre, two-layer PTFE lamination, PU Coated, Fluorocarbon Finish, 380g
100% Cotton Flame Resistant Lining, 170g
Yellow/Navy M-XXL

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034 EN ISO 20471 EN 343

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034 EN ISO 20471 EN 343

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
CHEMICAL RESISTANT
MULTI

FABRIC INFORMATION

Manufactured from 99% Cotton, 1% Carbon fibre 345g Bizflame Multi has been expertly developed to provide hi-vis, flame, welding, electric arc and anti-static protection while offering guaranteed wearer comfort.

ELIM 13 Cal/Cm²

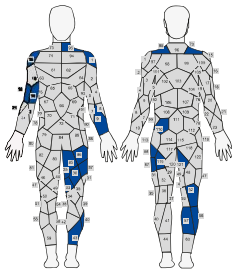
345g

ELIM 13 Cal/Cm²

345g

MANIKIN TEST RESULTS FOR: FR61 & FR62

Burn Injury Prediction 0%



- Pain (16%),
- 1st° Burn (0%)
- 2nd° Burn (0%)
- 3rd° Burn (0%)

HIGHEST PROTECTION AGAINST MOLTEN IRON SPLASH

FR61

HI-VIS MULTI-NORM JACKET

EN ISO 11612 A1+A2, B1, C1, E3, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 13 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 3
ASTM F1959/F1959M-12 ATPV = 13.6 CAL/CM² (HAF = 82%)

Bizflame Multi: 99% Cotton, 1% Carbon Fibre, 345g
Yellow/Navy S-3XL

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034 EN ISO 20471 ASTM F1959/ F1959M-12

FR62

HI-VIS MULTI-NORM TROUSERS

EN ISO 11612 A1+A2, B1, C1, E3, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 13 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 2
ASTM F1959/F1959M-12 ATPV = 13.6 CAL/CM² (HAF = 82%)

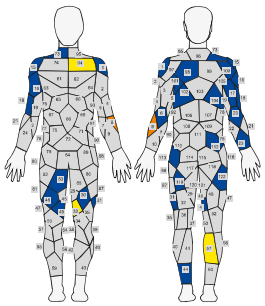
Bizflame Multi: 99% Cotton, 1% Carbon Fibre, 345g
Yellow/Navy S-3XL

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034 EN ISO 20471 ASTM F1959/ F1959M-12

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
CHEMICAL RESISTANT
MULTI

MANIKIN TEST RESULTS FOR: FR60

Burn Injury Prediction 0.9 %



- Pain (21.1%),
- 1st° Burn (2.6%)
- 2nd° Burn (0.9%)
- 3rd° Burn (0.0%)

ELIM 13 Cal/Cm²

345g

FR60

HI-VIS MULTI-NORM COVERALL

EN ISO 11612 A1+A2, B1, C1, E3, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 13 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE 6
EN ISO 20471 CLASS 3
ASTM F1959/F1959M-12 ATPV=13.6 CAL/CM² (HAF=82%)

- Protection against radiant, convective and contact heat
- Certified protection against molten metal splash
- Chest pockets with stud closure
- Quick and easy side access
- Hook and loop cuffs for a secure fit
- Contrast colouring for added style

Bizflame Multi: 99% Cotton, 1% Carbon Fibre, 345g
Yellow/Navy S-4XL

OUTSTANDING ACHIEVEMENT:

This innovative product has been awarded the prestigious BSIF award for Best Product. The multi-norm fabric combined with the functional garment design is the result of extensive research and development aimed at creating an industry leading garment.

4XL

CE CAT III

EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | EN ISO 20471 | ASTM F1959/ F1959M-12

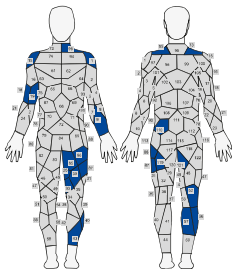
ELIM 13 Cal/Cm²

345g

PROPRIETARY FLAME RESISTANT CHEMICAL FINISH

MANIKIN TEST RESULTS FOR: FR63 & FR61

Burn Injury Prediction 0%



Pain (20.0%),
1st° Burn (1.0%)
2nd° Burn (0.0%)
3rd° Burn (0.0%)

ELIM 13 Cal/Cm²

345g

FR63

HI-VIS MULTI-NORM BIB AND BRACE

EN ISO 11612 A1+A2, B1, C1, E3, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 13 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
EN ISO 20471 CLASS 2
ASTM F1959/F1959M-12 ATPV=13.6 CAL/CM² (HAF=82%)

Bizflame Multi: 99% Cotton, 1% Carbon Fibre, 345g
Yellow/Navy S-3XL

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | EN ISO 20471 | ASTM F1959/ F1959M-12

FR80

MULTI-NORM COVERALL

EN ISO 11612 A1+A2 B1, C1, E3, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 13 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE 6
ASTM F1959/F1959M-12 ATPV=13.6 CAL/CM² (HAF=82%)

Bizflame Multi: 99% Cotton, 1% Carbon Fibre, 345g
Navy S-4XL

4XL

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | ASTM F1959/ F1959M-12

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
PRO

FABRIC INFORMATION

This fabric has been designed and developed to provide flame, welding and anti static protection.

Constructed from 99% cotton and 1% carbon fibre, 330g. The carbon fibres are evenly spread along the warp to achieve optimum anti static protection.

330g

FR92

HI-VIS BIZFLAME PRO TROUSERS

EN ISO 11612 A1+A2, B1, C1, E3, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
EN ISO 20471 CLASS 2

Bizflame Pro: 99% Cotton, 1% Carbon Fibre, 330g
Yellow S-XXL

CE CAT III — EN ISO 11612 EN ISO 11611 EN 1149 EN ISO 20471

330g

FR90

BIZFLAME SERVICES COVERALL

EN ISO 11612 A1+A2, B1, C1, E3, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
EN ISO 20471 CLASS 3

Bizflame Pro: 99% Cotton, 1% Carbon Fibre, 330g
Yellow S-3XL

CE CAT III — EN ISO 11612 EN ISO 11611 EN 1149 EN ISO 20471

330g

ANTI-STATIC BIZFLAME™ FLAME-RESISTANT PRO

BIZ7

HI-VIS ANTI-STATIC BIZFLAME PRO COVERALL

EN ISO 11612 A1+A2, B1, C1, E3, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
EN ISO 20471 CLASS 3

Bizflame Pro: 99% Cotton, 1% Carbon Fibre, 330g
Yellow/Navy S-4XL

4XL

CE CAT III

EN ISO 11612 EN ISO 11611 EN 1149 EN ISO 20471

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
PRO

OUTSTANDING PROTECTION - OUTSTANDING VALUE

330g

330g

24 UK CA
CE 40+ UPF
4

FR35

BIZFLAME PRO JACKET

EN ISO 11612 A1+A2, B1, C1, E3, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149-5

Bizflame Pro: 99% Cotton, 1% Carbon Fibre, 330g
Grey S-3XL, Navy S-3XL

CE CAT III
EN ISO 11612 EN ISO 11611 EN 1149

24 UK CA
CE 40+ UPF
4

FR36

BIZFLAME PRO TROUSERS

EN ISO 11612 A1+A2, B1, C1, E3, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149-5

Bizflame Pro: 99% Cotton, 1% Carbon Fibre, 330g
Grey S-3XL, Navy S-3XL

CE CAT III
EN ISO 11612 EN ISO 11611 EN 1149

ANTI-STATIC BIZFLAME FLAME-RESISTANT PRO

330g

330g

FR37

BIZFLAME PRO BIB AND BRACE

EN ISO 11612 A1+A2, B1, C1, E3, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149-5

Bizflame Pro: 99% Cotton, 1% Carbon Fibre, 330g
Navy S-3XL

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149

FR38

BIZFLAME PRO COVERALL

EN ISO 11612 A1+A2, B1, C1, E3, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149-5

Bizflame Pro: 99% Cotton, 1% Carbon Fibre, 330g
Navy S-3XL

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
ULTRA

INDUSTRIALLY LAUNDERABLE

PRO 1 2 3 4 5 6 7 8

MEETS INDUSTRIAL LAUNDRY REQUIREMENTS

WASH AT 75°C - TUNNEL DRY AT 155°C

FABRIC INFORMATION

Bizflame Ultra is blended from 80% cotton, 19% FR polyester and 1% carbon fibre, 340g. The FR polyester content in Bizflame Ultra provides excellent abrasion, shrinkage and colour fastness. This fabric is tough enough to withstand the rigours of industrial laundry making it ideal for the off shore industry.

ELIM 11 Cal/Cm²

340g

FR08 342

INDUSTRIALLY LAUNDERABLE

FR08

BIZFLAME ULTRA TWO TONE JACKET

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 11 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
ASTM F1959/F1959M-12 ATPV 16 CAL/CM² (HAF 83.7%)

Bizflame Ultra: 80% Cotton, 19% Polyester, 1% Carbon Fibre, 340g
Grey S-3XL, Royal Blue S-3XL

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | ASTM F1959/ F1959M-12

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
ULTRA

100% METAL FREE

ELIM 11 Cal/Cm²

340g

	SHORT	REG
	30"-42"	30"-46"
	30"-42"	30"-46"

FR06

BIZFLAME ULTRA TWO TONE TROUSER

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 11 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
ASTM F1959/F1959M-12 ATPV 16 CAL/CM² (HAF 83.7%)

Bizflame Ultra: 80% Cotton, 19% Polyester, 1% Carbon Fibre, 340g
Grey, Royal Blue
Short: 29" or 74cm adjustable to Reg 31" or 79cm
Reg: 31" or 79cm adjustable to Tall 33" or 84cm

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | ASTM F1959/ F1959M-12

ELIM 11 Cal/Cm²

340g

FR07

BIZFLAME ULTRA TWO TONE BIB & BRACE

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 11 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
ASTM F1959/F1959M-12 ATPV 16 CAL/CM² (HAF 83.7%)

Bizflame Ultra: 80% Cotton, 19% Polyester, 1% Carbon Fibre, 340g
Grey S-3XL, Royal Blue S-3XL
Short: 29" or 74cm adjustable to Reg 31" or 79cm
Reg: 31" or 79cm adjustable to Tall 33" or 84cm

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | ASTM F1959/ F1959M-12

ANTI-STATIC
BIZFLAME
FLAME-RESISTANT
ULTRA

WITHSTANDS THE RIGOURS OF INDUSTRIAL LAUNDRY

ELIM 11 Cal/Cm²

340g

100% METAL FREE

FR68

BIZFLAME ULTRA JACKET

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1 + A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 11 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
ASTM F1959/F1959M-12 ATPV 16 CAL/CM² (HAF 83.7%)

Bizflame Ultra: 80% Cotton, 19% Polyester, 1% Carbon Fibre, 340g
Navy S-3XL, Orange S-3XL

ELIM 11 Cal/Cm²

340g

	SHORT	REG
	30"-42"	30"-46"
	30"-42"	30"-46"

FR66

BIZFLAME ULTRA TROUSER

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 11 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
ASTM F1959/F1959M-12 ATPV 16 CAL/CM² (HAF 83.7%)

Bizflame Ultra: 80% Cotton, 19% Polyester, 1% Carbon Fibre, 340g
Navy, Orange
Short: 29" or 74cm adjustable to Reg 31" or 79cm
Reg: 31" or 79cm adjustable to Tall 33" or 84cm

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034 ASTM F1959/ F1959M-12

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 EN 13034 ASTM F1959/ F1959M-12

ELIM 11 Cal/Cm²

340g

FR67

BIZFLAME ULTRA BIB & BRACE

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 11 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE PB [6]
ASTM F1959/F1959M-12 ATPV 16 CAL/CM² (HAF 83.7%)

Bizflame Ultra: 80% Cotton, 19% Polyester, 1% Carbon Fibre, 340g
Navy S-3XL, Navy Short S-3XL, Orange S-3XL, Orange Short S-3XL
Short: 29" or 74cm adjustable to Reg 31" or 79cm
Reg: 31" or 79cm adjustable to Tall 33" or 84cm

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | ASTM F1959/ F1959M-12

ELIM 11 Cal/Cm²

340g

REG
S-3XL
S-5XL
S-5XL
S-3XL
S-3XL

FR93

BIZFLAME ULTRA COVERALL

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 11 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
EN 13034 TYPE 6
ASTM F1959/F1959M-12 ATPV 16 CAL/CM² (HAF 83.7%)

Bizflame Ultra: 80% Cotton, 19% Polyester, 1% Carbon Fibre, 340g
Grey, Navy, Orange, Red, Royal Blue
Reg: 31" or 79cm adjustable to Tall 33" or 84cm

5XL

CE CAT III | EN ISO 11612 | EN ISO 11611 | EN 1149 | IEC 61482-2 | EN 13034 | ASTM F1959/ F1959M-12

ANTI-STATIC BIZFLAME FLAME-RESISTANT PLUS

FABRIC INFORMATION

Our Bizflame Plus Stretch collection combines innovative lightweight flame-resistant fabric with cutting-edge design and a modern fit. High-performance stretch fabrics are used at key movement areas to provide unparalleled ease of movement and supreme flexibility when working. Back ventilation provides great wearer comfort and improved breathability in hot conditions. Engineered for active work, this range is perfect for the demands of the offshore industry.

ELIM 9 Cal/Cm²

210g

• NEW

2X Stretch

FR601

BIZFLAME PLUS LIGHTWEIGHT STRETCH PANELLED JACKET

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 9 CAL/CM²

- Innovative stretch panelling in key movement areas provides excellent comfort and flexibility
- Protection against radiant, convective and contact heat
- Sleeve pocket
- Back vents on upper and lower back for maximum breathability
- 100% metal free
- Hook and loop cuffs for a secure fit

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 210g
Bizflame Plus Stretch: 97% Cotton, 2% Elastane, 1% Carbon Fibre, 210g
Navy S-3XL, Orange S-3XL

ELIM 9 Cal/Cm²

210g

• NEW

2X Stretch

FR401

BIZFLAME PLUS LIGHTWEIGHT STRETCH PANELLED TROUSER

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 9 CAL/CM²

- Innovative stretch panelling in key movement areas provides excellent comfort and flexibility
- Protection against radiant, convective and contact heat
- Easy access cargo pocket
- Rule pocket
- Two back pockets
- Stretch crotch gusset provides maximum flexibility and reduces stress

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 210g
Bizflame Plus Stretch: 97% Cotton, 2% Elastane, 1% Carbon Fibre, 210g
Navy S-3XL, Orange S-3XL
Reg: 31" or 79cm adjustable to Tall 33" or 84cm

CE CAT III — EN ISO 11612 — EN ISO 11611 — EN 1149 — IEC 61482-2

CE CAT III — EN ISO 11612 — EN ISO 11611 — EN 1149 — IEC 61482-2

ANTI-STATIC BIZFLAME™ FLAME-RESISTANT PLUS

NEW

ELIM 8.6 Cal/Cm²

350g

2X Stretch

FR501

BIZFLAME PLUS STRETCH PANELLED COVERALL

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 8.6 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 ATPV=13.6 CAL/CM² (HAF=82%)

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g
Bizflame Plus Stretch: 97% Cotton, 2% Elastane, 1% Carbon Fibre, 350g
Navy S-3XL, Orange S-3XL
Reg: 31" or 79cm adjustable to Tall 33" or 84cm

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 ASTM F1959/ F1959M-12

NEW

ELIM 9 Cal/Cm²

210g

2X Stretch

FR502

BIZFLAME PLUS LIGHTWEIGHT STRETCH PANELLED COVERALL

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 9 CAL/CM²

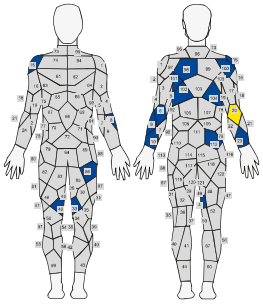
Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 210g
Bizflame Plus Stretch: 97% Cotton, 2% Elastane, 1% Carbon Fibre, 210g
Navy S-3XL, Orange S-3XL
Reg: 31" or 79cm adjustable to Tall 33" or 84cm

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
PLUS

MANIKIN TEST RESULTS FOR: FR50

Burn Injury Prediction 0.0 %



- Pain (12.3%),
- 1st° Burn (0.9%)
- 2nd° Burn (0.0%)
- 3rd° Burn (0.0%)

ELIM 8.6 Cal/Cm²

350g

FR50

FLAME RESISTANT ANTI-STATIC COVERALL 350G

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 8.6 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 ATPV=13.6 CAL/CM² (HAF=82%)

- Protection against radiant, convective and contact heat
- Class 2 welding protection
- Rule pocket
- Two back patch pockets
- Hook and loop cuffs for a secure fit
- Action back for extra freedom of movement

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g
Black, Grey, Navy, Orange, Red, Royal Blue, White

WOMEN'S STYLE AVAILABLE

FR51

	REG	TALL
	S-XXL	
	XS-5XL	M-5XL
	XS-6XL	M-3XL
	XS-5XL	S-3XL
	XS-5XL	S-3XL
	XS-4XL	M-XXL
	S-XXL	

XS

6XL

CE CAT III

EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 ASTM F1959/ F1959M-12

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
PLUS

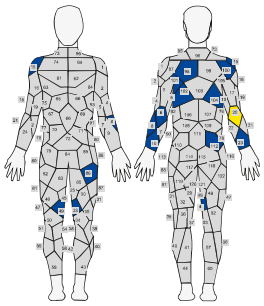
UK/USA SIZING

ELIM 8.6 Cal/Cm²

350g

MANIKIN TEST RESULTS FOR: FF50

Burn Injury Prediction 0.0 %



- Pain (12.3%),
- 1st° Burn (0.9%)
- 2nd° Burn (0.0%)
- 3rd° Burn (0.0%)

12

UK CA

CE

FR,IW

40 UPF

10

FF50

ABERDEEN FR COVERALL

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 8.6 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 ATPV=13.6 CAL/CM² (HAF=82%)

- Protection against radiant, convective and contact heat
- Class 2 welding protection
- Two back patch pockets
- Rule pocket
- Stud adjustable cuffs for a secure fit
- Triple-stitched seams for extra durability

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g

Navy, Orange, Red

REG
36"-54"
36"-54"
36"-54"

54"

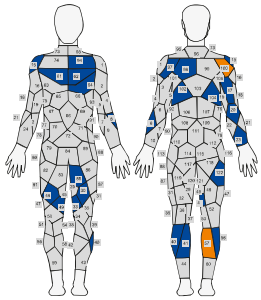
CE CAT III

EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 ASTM F1959/ F1959M-12

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
PLUS

MANIKIN TEST RESULTS FOR: FR28

Burn Injury Prediction 1.8 %



- Pain (19.3%),
- 1st° Burn (0.0%)
- 2nd° Burn (1.8%)
- 3rd° Burn (0.0%)

280g

FR28

FLAME RESISTANT LIGHT WEIGHT ANTI-STATIC COVERALL 280G

EN ISO 11612 A1+A2, B1, C1, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5

- Protection against radiant, convective and contact heat
- Class 2 welding protection
- Rule pocket
- Two back patch pockets
- Action back for extra freedom of movement
- Hook and loop cuffs for a secure fit

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 280g
Black, Grey, Navy, Orange, Red, Royal Blue

	REG
	S-XXL
	S-XXL
	XS-5XL
	XS-4XL
	S-3XL
	S-3XL

XS 5XL

EN ISO 11612 EN ISO 11611 EN 1149

PREMIUM CLASS 2 WELDING PROTECTION

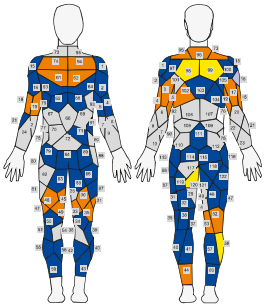
ANTI-STATIC BIZFLAME™ FLAME-RESISTANT PLUS

LIGHTWEIGHT FLAME RESISTANT PROTECTION

210g

MANIKIN TEST RESULTS FOR: FR21

Burn Injury Prediction 19.0 %



- Pain (48.0%),
- 1st° Burn (6.0%)
- 2nd° Burn (19.0%)
- 3rd° Burn (0.0%)

FR21

FLAME RESISTANT SUPER LIGHT WEIGHT ANTI-STATIC COVERALL 210G

EN ISO 11612 A1+A2, B1, C1, E2,F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
ASTM F1959/F1959M-12 ATPV = 9.1CAL/CM²

- Lightweight for enhanced wearing comfort
- Protection against radiant, convective and contact heat
- Rule pocket
- Two back patch pockets
- Durable, strong and long lasting brass zip
- Action back for extra freedom of movement

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 210g
Black, Grey, Khaki, Navy, Orange, Red, Royal Blue

	REG	TALL
	S-XXL	
	S-XXL	
	S-3XL	
	XS-4XL	M-XXL
	XS-4XL	M-XXL
	XS-4XL	S-3XL
	XS-3XL	

XS 4XL

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 ASTM F1959/ F1959M-12

210g

NEW

ANTI-STATIC BIZFLAME FLAME-RESISTANT PLUS

MADE FOR WOMEN

ELIM 8.6 Cal/Cm²

350g

LIGHTWEIGHT INSECT REPELLENT PROTECTION

FR22

INSECT REPELLENT FLAME RESISTANT COVERALL

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
ASTM F1959/F1959M-12 APTV 9.1CAL/CM²

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 210g
Navy S-3XL

FR51

BIZFLAME PLUS WOMEN'S COVERALL 350G

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 8.6 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 ATPV 13.6 CAL CM² (HAF 82%)

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g
Navy XS-XXL, Orange XS-XXL
Short: 29" or 74cm adjustable to Reg 31" or 79cm

CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 ASTM F1959/ F1959M-12

XS CE CAT III EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 ASTM F1959/ F1959M-12

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
PLUS

210g

NEW

24

UK CA

CE

40+ UPF

3

FR34

FR STANDARD COAT

EN ISO 11612 A1+A2, B1, C1, E2,F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5
ASTM F1959/F1959M-14E1 ATPV 9.1CAL/CM²

- Protection against radiant, convective and contact heat
- Lightweight for enhanced wearing comfort
- 3 pockets for ample storage
- Pen division on left pocket
- Concealed stud front for easy access
- Lightweight and comfortable

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 210g
X **Navy S-3XL**

CE CAT III — EN ISO 11612 — EN ISO 11611 — EN 1149 — ASTM F1959/ F1959M-12

530g

NEW

50

UK CA

CE

40+ UPF

FR29

FR HOOD

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
EN 1149 -5

- Hook and loop strap for safe and secure fit
- Back elastic for ease of movement
- Lined for added warmth and comfort
- Compatible with most helmets
- 40+ UPF rated fabric to block 98% of UV rays

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 210g
100% Cotton Flame Resistant Lining, 170g
100% Polyester Flame Resistant Filling, 150g
X **Navy One Size**

CE CAT III — EN ISO 11612 — EN ISO 11611 — EN 1149

210g

NEW

X12 25

FR101 **FR ID HOLDER**

- ID card holder for ID card display
- Loop with ring stud fastening can be attached to many styles
- Sold in packs of 25

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 210g
X **Black One Size**

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
PLUS

ELIM
8.6
Cal/Cm²

350g

FR25

BIZFLAME PLUS JACKET

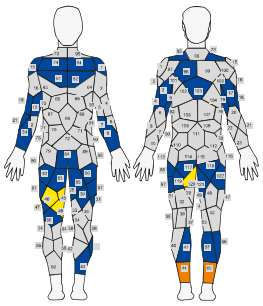
EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 8.6 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 ATPV=13.6 CAL/CM² (HAF=82%)

- Protection against radiant, convective and contact heat
- Class 2 welding protection
- Two lower pockets with stud closure
- Two chest pockets with stud closure
- Concealed stud and zip fastening
- Hook and loop cuffs for a secure fit

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g
Navy S-4XL, Orange S-4XL

MANIKIN TEST RESULTS FOR: FR25 & FR26

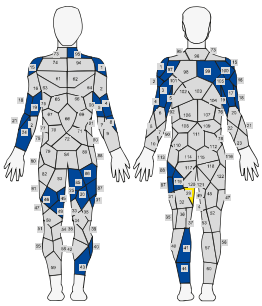
Burn Injury Prediction 3.0 %



- Pain (35.0%),
- 1st° Burn (2.0%)
- 2nd° Burn (3.0%)
- 3rd° Burn (0.0%)

MANIKIN TEST RESULTS FOR: FR25 & FR27

Burn Injury Prediction 0.0 %



- Pain (24.0%),
- 1st° Burn (1.0%)
- 2nd° Burn (0.0%)
- 3rd° Burn (0.0%)

4XL

CE CAT III

EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 ASTM F1959/ F1959M-12

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
PLUS

ELIM 8.6 Cal/Cm²

350g

24 UKCA
CE FR.IW
40+ UPF 7

FR26

BIZFLAME PLUS TROUSER

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 8.6 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 ATPV=13.6 CAL/CM² (HAF=82%)

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g
Navy XS-4XL, Orange S-4XL, Navy Tall M-XXL, Orange Tall M-XXL

XS 4XL

CE CAT III — EN ISO 11612 — EN ISO 11611 — EN 1149 — IEC 61482-2 — ASTM F1959/ F1959M-12

ELIM 8.6 Cal/Cm²

350g

18 UKCA
CE FR.IW
40+ UPF 7

FR27

BIZFLAME PLUS BIB AND BRACE

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 8.6 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 ATPV=13.6 CAL/CM² (HAF=82%)

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g
Navy S-3XL, Orange S-4XL

4XL

CE CAT III — EN ISO 11612 — EN ISO 11611 — EN 1149 — IEC 61482-2 — ASTM F1959/ F1959M-12

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
PLUS

ELIM
8.6
Cal/Cm²

350g

FR55

BIZFLAME PLUS JACKET

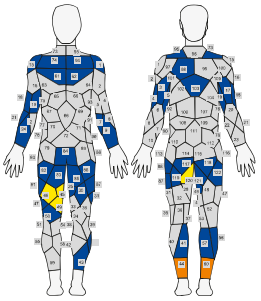
EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 8.6 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 ATPV=13.6 CAL/CM² (HAF=82%)

- Protection against radiant, convective and contact heat
- Class 2 welding protection
- Two lower pockets with stud closure
- Two chest pockets with stud closure
- Zip opening with concealed press studs
- Contrast colouring for added style

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g
Navy/Red S-4XL, Navy/Royal S-3XL

MANIKIN TEST RESULTS FOR: FR55 & FR56

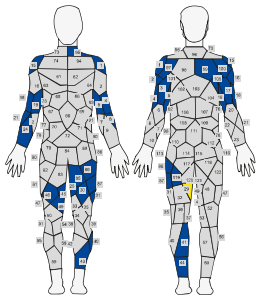
Burn Injury Prediction 3.0 %



- Pain (35.0%),
- 1st° Burn (2.0%)
- 2nd° Burn (3.0%)
- 3rd° Burn (0.0%)

MANIKIN TEST RESULTS FOR: FR55 & FR57

Burn Injury Prediction 0.0 %



- Pain (24.0%),
- 1st° Burn (1.0%)
- 2nd° Burn (0.0%)
- 3rd° Burn (0.0%)

4XL

CE CAT III

EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 ASTM F1959/ F1959M-12

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
PLUS

ELIM 8.6 Cal/Cm²

350g

ELIM 8.6 Cal/Cm²

350g

FR56
BIZFLAME PLUS TROUSER

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 8.6 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 ATPV=13.6 CAL/CM² (HAF=82%)

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g
Navy/Red S-4XL, Navy/Royal S-3XL, Navy/Red Tall M-XXL

4XL

CE CAT III
EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 ASTM F1959/ F1959M-12

FR57
BIZFLAME PLUS BIB AND BRACE

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 8.6 CAL/CM²
IEC 61482-2 IEC 61482-1-2 APC 1
ASTM F1959/F1959M-12 ATPV=13.6 CAL/CM² (HAF=82%)

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g
Navy/Red S-4XL, Navy/Royal S-3XL

4XL

CE CAT III
EN ISO 11612 EN ISO 11611 EN 1149 IEC 61482-2 ASTM F1959/ F1959M-12

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
PLUS

EN 342

PADDED

670g

FR53

FR ANTI-STATIC WINTER COVERALL

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
EN 342 0.318 (M².K/W), 2, X

- Protection against radiant, convective and contact heat
- FR cotton lined for added warmth and comfort
- Concealed brass zips on chest pockets
- Two back patch pockets
- Action back for extra freedom of movement
- Durable, strong and long lasting brass zip

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g
100% Cotton Flame Resistant Lining, 170g
100% Polyester Flame Resistant Filling, 150g
Navy S-3XL, Orange S-3XL, Royal Blue S-3XL, Red S-3XL, Orange Tall M-XXL

WINTER GARMENTS DESIGNED FOR THE OIL & GAS INDUSTRY

CE CAT III

EN ISO 11612 EN ISO 11611 EN 1149 EN 342

ANTI-STATIC
BIZFLAME
FLAME-RESISTANT
PLUS

EN 342
PADDED
670g

FR59
FR ANTI-STATIC WINTER JACKET

EN ISO 11612 A1+A2 B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
EN 342 0.321 (M².K/W), 2, X

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g
100% Cotton Flame Resistant Lining, 170g
100% Polyester Flame Resistant Filling, 150g
Navy S-3XL, Orange S-3XL, Royal Blue S-3XL, Red S-3XL

CE CAT III
EN ISO 11612 EN ISO 11611 EN 1149 EN 342

EN 342
PADDED
670g

FR58
FR ANTI-STATIC WINTER SALOPETTES

EN ISO 11612 A1+A2 B1, C1, E2, F1
EN ISO 11611 CLASS 2 A1+A2
EN 1149 -5
EN 342 0.321 (M².K/W), 2, X

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 350g
100% Cotton Flame Resistant Lining, 170g
100% Polyester Flame Resistant Filling, 150g
Navy S-3XL, Orange S-3XL, Royal Blue S-3XL, Red S-3XL

CE CAT III
EN ISO 11612 EN ISO 11611 EN 1149 EN 342

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
PLUS

160g

NEW COLOUR

FR69

BIZFLAME PLUS SHIRT

EN ISO 11612 A1, B1, C2
EN 1149 -5
EN 13034 TYPE PB [6]

- Protects against radiant and convective heat
- Lightweight and comfortable
- Chest pockets with stud closure
- Concealed stud front for easy access
- Stud adjustable cuffs for a secure fit
- Shirt tail hem stays tucked in

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 160g
Blue S-3XL, Navy S-3XL

CE CAT III — EN ISO 11612 — EN 1149 — EN 13034

BIZFLAME™
FLAME-RESISTANT
88/12

237g

NEW

FR95

BIZFLAME 88/12 FR HI-VIS SHIRT

EN ISO 11612 A1+A2, B1, C1, F1
EN ISO 20471 CLASS 3
NFPA® 70E
NFPA® 2112
ASTM F1506-10A
ASTM F1959/F1959M-12 ATPV 9 CAL CM² (HAF 75.6%)

2 ARC — 40+ UPF

- Protection against radiant, convective and contact heat
- Lightweight for enhanced wearing comfort
- Two chest pockets with button and flap closure
- Action back for extra freedom of movement
- Button cuffs for a secure and comfortable fit
- Shirt tail hem stays tucked in

Bizflame 88/12: 88% Cotton, 12% Nylon, 237g
Yellow S-3XL

CE CAT III — EN ISO 11612 — EN ISO 20471 — ASTM F1959/F1959M-12 — NFPA 2112 — NFPA 70E

BIZFLAME™ FLAME-RESISTANT 88/12

ELIM 9.1 Cal/Cm²

237g

FR89

BIZFLAME 88/12 FR SHIRT

EN ISO 11612 A1+A2, B1, C1
NFPA® 70E
NFPA® 2112
ASTM F1506-10A
IEC 61482-2 IEC 61482-1-1 ELIM 9.1 CAL/CM²
ASTM F1959/F1959M-12 ATPV 8.2 CAL/CM² (HAF 69.1%)

- Lightweight and comfortable
- Dual hazard protection
- Two chest pockets with button and flap closure
- Pen division on left pocket
- Shirt tail hem stays tucked in
- Button cuffs for a secure and comfortable fit

Bizflame 88/12: 88% Cotton, 12% Nylon, 237g
Grey S-5XL, Khaki S-5XL, Navy S-5XL

5XL

CE CAT III | EN ISO 11612 | IEC 61482-2 | ASTM F1959/ F1959M-12 | NFPA 2112 | NFPA 70E

ANTI-STATIC BIZFLAME™ FLAME-RESISTANT KNIT

FABRIC INFORMATION

This smooth, high-performance interlock knit is made from 99% cotton, 1% antistatic. The fabric offers superior strength and a lightweight feel offering the wearer superb working comfort. Bizflame Knit offers outstanding protection against electric arc with a minimum ATPV rating of 10 Cal/cm².

2 ARC
ELIM 13 Cal/Cm²
237g
NEW

FR32

FR ANTI-STATIC HENLEY

EN ISO 11612 A1 + A2, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 13CAL/CM2
NFPA® 2112
NFPA® 70E
ASTM F1506-10A
ASTM F1959/F1959M-14E1 ATPV 10 CAL/CM² (HAF 82.3%)

- Protection against radiant, convective and contact heat
- Moisture wicking fabric helping to keep the body cool and dry
- Concealed chest pocket
- Sleeve pocket
- Button placket opening
- Flame resistant ribbed cuff for added safety

Bizflame Knit Antistatic: 99% Cotton, 1% Carbon Fibre, 237g
Grey S-3XL, Navy S-3XL

CE CAT III | EN ISO 11612 | EN 1149 | IEC 61482-2 | ASTM F1959/ F1959M-14E | NFPA 2112 | NFPA 70E

2 ARC
ELIM 13 Cal/Cm²
237g
NEW

FR33

FR ANTI-STATIC CREW NECK

EN ISO 11612 A1 + A2, B1, C1, F1
EN 1149 -5
IEC 61482-2 IEC 61482-1-1 ELIM 13CAL/CM²
NFPA® 2112
NFPA® 70E
ASTM F1506-10A
ASTM F1959/F1959M-14E1 ATPV 10 CAL/CM² (HAF 82.3%)

- Protection against radiant, convective and contact heat
- Sleeve pocket
- Concealed chest pocket
- Raglan sleeves for a comfort fit
- Flame resistant ribbed cuff for added safety
- FR aramid thread for extra durability and protection

Bizflame Knit Antistatic: 99% Cotton, 1% Carbon Fibre, 237g
Grey S-3XL, Navy S-3XL

CE CAT III | EN ISO 11612 | EN 1149 | IEC 61482-2 | ASTM F1959/ F1959M-14E | NFPA 2112 | NFPA 70E

BIZFLAME™
FLAME-RESISTANT
WORK

FR85 HI-VIS ANTI STATIC JACKET - FLAME RESISTANT

EN ISO 14116 INDEX 1
EN 1149 -5
EN ISO 20471 CLASS 3
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)

- Anti-static
- Premium sew on flame resistant reflective tape
- Hook and loop closure for easy access
- 100% metal free
- Lightweight and comfortable
- Generous fit for wearer comfort

Bizflame Work Antistatic: 98% Polyester 2% Carbon Fibre, Warp Knitted, 120g
Orange S/M-XXL/3XL, Yellow S/M-XXL/3XL

EN ISO 14116 · EN 1149 · EN ISO 20471 · RIS 3279

120g

ANTI-STATIC CARBON FIBRE

FR71 HI-VIS ANTI STATIC VEST - FLAME RESISTANT

EN ISO 14116 INDEX 1
EN 1149 -5
EN ISO 20471 CLASS 2
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)

- Anti-static
- Premium sew on flame resistant reflective tape
- Hook and loop closure for easy access
- 100% metal free
- Lightweight and comfortable
- Generous fit for wearer comfort

Bizflame Work Antistatic: 98% Polyester 2% Carbon Fibre, Warp Knitted, 120g
Yellow S/M - 4XL/5XL, Orange S/M - XXL/3XL

EN ISO 14116 · EN 1149 · EN ISO 20471 · RIS 3279

120g

5XL

ANTI-STATIC CARBON FIBRE

FR75 HI-VIS FR VEST

EN ISO 14116 INDEX 1
EN ISO 20471 CLASS 2
RIS 3279 TOM ISSUE 2 (ORANGE ONLY)

- Premium sew on flame resistant reflective tape
- Hook and loop closure for easy access
- 100% metal free
- Lightweight and comfortable
- Generous fit for wearer comfort
- Available in sizes up to 5XL

Bizflame Work: 100% Polyester, Warp Knitted, 120g
Yellow S/M - 4XL/5XL, Orange S/M - XXL/3XL

EN ISO 14116 · EN ISO 20471 · RIS 3279

120g

5XL

BIZWELD™
FLAME-RESISTANT

FABRIC INFORMATION

Bizweld is a proprietary, flame resistant, 100% high grade cotton fabric. This is a high technology fabric developed for maximum performance, comfort and durability.

ELIM 8.3 Cal/Cm²

330g

ELIM 8.3 Cal/Cm²

330g

VERSATILE FLAME AND WELDING PROTECTION

IONA

24 UK CA

CE FR

40+ UPF 3

BZ13

BIZWELD IONA JACKET

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
IEC 61482-2 IEC 61482-1-1 ELIM 8.3 CAL/CM²
ASTM F1959/F1959M-12 ATPV 11.2 CAL/CM² (HAF = 80.4%)

Bizweld: 100% Cotton, FR Finish, 330g
Navy S-3XL, Orange S-3XL

CE CAT III — EN ISO 11612 — EN ISO 11611 — IEC 61482-2 — ASTM F1959/ F1959M-12

IONA

24 UK CA

CE FR

40+ UPF 3

BZ14

BIZWELD IONA TROUSER

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1 + A2
IEC 61482-2 IEC 61482-1-1 ELIM 8.3 CAL/CM²
ASTM F1959/F1959M-12 ATPV 11.2 CAL/CM² (HAF = 80.4%)

Bizweld: 100% Cotton, FR Finish, 330g
Navy S-3XL, Orange S-3XL

CE CAT III — EN ISO 11612 — EN ISO 11611 — IEC 61482-2 — ASTM F1959/ F1959M-12

BIZWELD™
FLAME-RESISTANT

NEW

ELIM 8.3 Cal/Cm²

330g

IONA

BZ17

BIZWELD IONA BIB & BRACE

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1 + A2
IEC 61482-2 IEC 61482-1-1 ELIM 8.3 CAL/CM²
ASTM F1959/F1959M-12 ATPV 11.2 CAL/CM² (HAF = 80.4%)

Bizweld: 100% Cotton, FR Finish, 330g
Navy S-3XL

CE CAT III | EN ISO 11612 | EN ISO 11611 | IEC 61482-2 | ASTM F1959/F1959M-12

ELIM 8.3 Cal/Cm²

330g

	REG	TALL
	S-3XL	
	S-3XL	
	XS-5XL	M-3XL
	XS-5XL	M-XL
	S-3XL	
	S-3XL	

IONA

BIZ5

BIZWELD IONA FR COVERALL

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
IEC 61482-2 IEC 61482-1-1 ELIM 8.3 CAL/CM²
ASTM F1959/F1959M-12 ATPV 11.2 CAL/CM² (HAF = 80.4%)

Bizweld: 100% Cotton, FR Finish, 330g
Black, Grey, Navy, Orange, Red, Royal Blue

XS 5XL | CE CAT III | EN ISO 11612 | EN ISO 11611 | IEC 61482-2 | ASTM F1959/F1959M-12

BIZWELD™ FLAME-RESISTANT

ELIM 8.3 Cal/Cm²

330g

BIZ2

BIZWELD JACKET

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
IEC 61482-2 IEC 61482-1-1 ELIM 8.3 CAL/CM²
ASTM F1959/F1959M-12 ATPV 11.2 CAL/CM² (HAF = 80.4%)

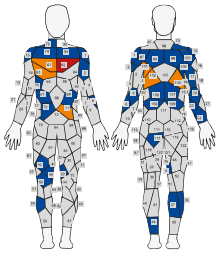
Bizweld: 100% Cotton, FR Finish, 330g
Black S-3XL, Navy XS-5XL, Orange S-3XL, Royal Blue S-3XL

XS 5XL

CE CAT III EN ISO 11612 EN ISO 11611 IEC 61482-2 ASTM F1959/ F1959M-12

MANIKIN TEST RESULTS FOR: BIZ2 & BZ30

Burn Injury Prediction 5.3%



- Pain (28.9%),
- 1st° Burn (0.0%)
- 2nd° Burn (4.4%)
- 3rd° Burn (0.9%)

ELIM 8.3 Cal/Cm²

330g

BZ30

BIZWELD TROUSERS

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
IEC 61482-2 IEC 61482-1-1 ELIM 8.3 CAL/CM²
ASTM F1959/F1959M-12 ATPV 11.2 CAL/CM²
(HAF = 80.4%)

Bizweld: 100% Cotton, FR Finish, 330g
Black, Navy, Orange, Royal Blue

	REG	TALL
	S-XXL	M-XL
	XS-5XL	S-3XL
	S-XXL	
	S-XXL	M-XL

XS 5XL

CE CAT III EN ISO 11612 EN ISO 11611 IEC 61482-2 ASTM F1959/ F1959M-12

BIZWELD™
FLAME-RESISTANT

ELIM 8.3 Cal/Cm²

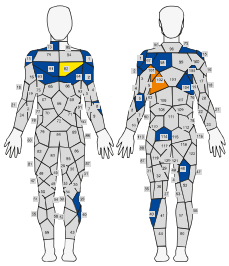
330g

ELIM 8.3 Cal/Cm²

330g

MANIKIN TEST RESULTS FOR: BIZ1

Burn Injury Prediction 1.8%



Pain (12.3%),
1st° Burn (0.9%)
2nd° Burn (1.8%)
3rd° Burn (0.0%)

BIZ4

BIZWELD BIB AND BRACE

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
IEC 61482-2 IEC 61482-1-1 ELIM 8.3 CAL/CM²
ASTM F1959/F1959M-12 ATPV 11.2 CAL/CM²
(HAF = 80.4%)

Bizweld: 100% Cotton, FR Finish, 330g
Navy S-3XL

BIZ1

BIZWELD FR COVERALL

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
IEC 61482-2 IEC 61482-1-1 ELIM 8.3 CAL/CM²
ASTM F1959/F1959M-12 ATPV 11.2 CAL/CM²
(HAF = 80.4%)

Bizweld: 100% Cotton, FR Finish, 330g
Black, Bottle Green, Grey, Navy, Orange, Red, Royal Blue

	REG	TALL
	XS-4XL	M-3XL
	S-3XL	
	S-3XL	
	XS-6XL	S-5XL
	S-4XL	
	XS-5XL	
	S-4XL	

CE CAT III — EN ISO 11612 — EN ISO 11611 — IEC 61482-2 — ASTM F1959/ F1959M-12

XS 6XL

CE CAT III — EN ISO 11612 — EN ISO 11611 — IEC 61482-2 — ASTM F1959/ F1959M-12

BIZWELD™
FLAME-RESISTANT

ELIM 8.3 Cal/Cm²

330g

2 ARC

BZ31

BIZWELD FR CARGO PANT

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
IEC 61482-2 IEC 61482-1-1 ELIM 8.3 CAL/CM²
NFPA® 70E
NFPA® 2112
ASTM F1506-10A
ASTM F1959/F1959M-12 ATPV 11.2 CAL/CM² (HAF = 80.4%)

- Dual hazard protection
- Protection against radiant, convective and contact heat
- Rule pocket
- Two back patch pockets
- Available in sizes up to 5XL
- Easy access cargo pocket

Bizweld: 100% Cotton, FR Finish, 330g
Grey S-5XL, Navy S-5XL

5XL

CE CAT III | EN ISO 11612 | EN ISO 11611 | IEC 61482-2 | ASTM F1959/F1959M-12 | NFPA 2112 | NFPA 70E

330g

C030

CE SAFE-WELDER COVERALL

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2

Safe Welder: 100% Cotton, 330g
Navy XS-5XL, Royal Blue S-3XL, Red S-3XL

XS 5XL

CE CAT III | EN ISO 11612 | EN ISO 11611

SAFE WELDER™

ELIM 8.3 Cal/Cm²

330g

15 | UK CA | CE | 40+ UPF | 9

BIZ6

BIZWELD HOODED COVERALL

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
IEC 61482-2 IEC 61482-1-1 ELIM 8.3 CAL/CM²
ASTM F1959/F1959M-12 ATPV 11.2 CAL/CM² (HAF = 80.4%)

Bizweld: 100% Cotton, FR Finish, 330g
Navy S-3XL

CE CAT III | EN ISO 11612 | EN ISO 11611 | IEC 61482-2 | ASTM F1959/ F1959M-12

330g

50 | 10 | UK CA | CE | 40+ UPF

BZ12

BIZWELD CAPE HOOD

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
ASTM F1959/F1959M-12 ATPV 11.2 CAL/CM² (HAF = 80.4%)

- Protection against radiant, convective and contact heat
- Certified protection against molten metal splash
- Designed with a comfort fit
- CE-CAT III
- 40+ UPF rated fabric to block 98% of UV rays
- CE certified

Bizweld: 100% Cotton, FR Finish, 330g
Navy One Size

CE CAT III | EN ISO 11612 | EN ISO 11611 | ASTM F1959/ F1959M-12

330g

100 | 10 | UK CA | CE | 40+ UPF | 2

BZ11

BIZWELD SLEEVES

EN ISO 11612 A1+A2, B1, C1, E2, F1
EN ISO 11611 CLASS 1 A1+A2
ASTM F1959/F1959M-12 ATPV 11.2 CAL/CM² (HAF = 80.4%)

- Protection against radiant, convective and contact heat
- Certified protection against molten metal splash
- Designed with a comfort fit
- CE-CAT III
- 40+ UPF rated fabric to block 98% of UV rays
- This product is sold in pairs

Bizweld: 100% Cotton, FR Finish, 330g
Navy One Size

CE CAT III | EN ISO 11612 | EN ISO 11611 | ASTM F1959/ F1959M-12

SAFEWELDER

Safewelder is made using premium split cowhide leather and stitched with para-aramid thread. Designed to last in the toughest environments, this collection offers enhanced protection when welding.

EN ISO 11611

NEW

EXTRA PROTECTION FOR HEAVY WELDING JOBS

SW34

LEATHER WELDING JACKET

EN ISO 11611 CLASS 2 A1

- Made with cowhide leather for a premium finish
- Class 2 welding protection
- Internal pocket for safe storage
- Adjustable waist for a perfect fit
- Concealed hook and loop fastening for easy closure
- Hook and loop cuffs for a secure fit

Split Cowhide Leather, thickness 1.3 mm, Tan M-3XL

SW31

LEATHER WELDING TROUSER

EN ISO 11611 CLASS 2 A1

- Made with cowhide leather for a premium finish
- Class 2 welding protection
- Button front closure
- Wider belt loops for wider belts
- Designed to be worn in a tough work environment
- CE certified

Split Cowhide Leather, thickness 1.3 mm, Tan S-3XL

SAFEWELDER

THE BEST WELDING ACCESSORIES ON THE MARKET

40 UK CA CE 2

SW32

LEATHER WELDING BOOT COVER

EN ISO 11611 CLASS 2 A1

- Class 2 welding protection
- Designed with a comfort fit
- Designed to be worn in a tough work environment
- CE certified
- This product is sold in pairs

Split Cowhide Leather, thickness 1.3 mm
Tan 36cm/14"

30 UK CA CE

SW10

LEATHER WELDING APRON

EN ISO 11611 CLASS 2 A1

- Made with cow suede leather for a premium finish
- Class 2 welding protection
- Chest pocket with hook and loop closure
- Ergonomic quick release buckle
- Adjustable straps for a secure fit
- Designed to be worn in a tough work environment

Split Cowhide Leather, thickness 1.3 mm
Tan 91cm x 58cm

40 UK CA CE

SW33

LEATHER HOOD

EN ISO 11611 CLASS 2 A1

- Class 2 welding protection
- Designed with a comfort fit
- CE certified
- Designed to be worn in a tough work environment

Split Cowhide Leather, thickness 1.3 mm
Tan One Size

EN ISO 11611

48 UK CA CE 2

SW20

LEATHER WELDING SLEEVES

EN ISO 11611 CLASS 2 A1

- Class 2 welding protection
- Elasticated cuffs for a secure fit
- Designed to be worn in a tough work environment
- Designed with a comfort fit
- CE certified
- This product is sold in pairs

Split Cowhide Leather, thickness 1.3 mm
Tan 40cm

ANTI-STATIC
BIZFLAME™
FLAME-RESISTANT
WILDLAND FIRE

FABRIC INFORMATION

This lightweight fabric provides a level of comfort, softness and moisture management reducing the risk of heat stress in hot environments and designed to protect against the hazards of wildland fires.

GARMENT BENEFITS

- Tape on shoulders for overhead visibility
- High collar, offering full neck protection, designed to suit all helmets
- Radio pocket designed to suit all sizes
- Knitted cuffs / Tab and hook & loop adjustment to prevent debris entering sleeves when working overhead.

EN 15614

TEST METHODS AND PERFORMANCE REQUIREMENTS FOR WILDLAND CLOTHING

This European standard specifies methods of test and minimum performance requirements for protective clothing, designed to protect the wearers body, except the head, hands and feet, to be worn in wildland firefighting and associated activities. This clothing is not intended to provide protection during fire entrapment. This European standard covers the general design of the clothing, the minimum level of performance for the materials employed and the methods of test to determine these levels.

This European standard is not applicable to clothing for use in situations encountered in structural firefighting (EN 469 and ISO 11613) or where a high level of radiant heat is expected (EN 1486), nor does this European standard cover clothing to protect against chemical, biological, electrical or radiation hazards.

WILDLAND FIRE PROTECTION

280g

FR98

WILDLAND FIRE COVERALL

EN ISO 11612 A1+A2, B1, C1
EN 15614
EN 1149 -5

Bizflame Plus: 99% Cotton, 1% Carbon Fibre, 280g
Navy S-XXL

CE CAT III

EN ISO 11612 EN 15614 EN 1149


PS54 807
PS47 821
MV25 310
A745 708

STRUCTURAL FIRE SUITS

Structural Fire Suits can endure high levels of heat for brief periods of time without combusting and burning and therefore minimises body burn percentage when exposed to heat and flames.

The Structural Fire Suit has three components: an outer shell, a moisture barrier, and a thermal barrier, all serving a different function. The outer layer protects against flame injury and burns caused by conductive heat. The moisture barrier protects against water penetration and allows internal moisture vapour to escape.

It is imperative that the layers are kept dry to avoid the transfer of heat in a convective manner from the outer layer through the layers to the skin. The inner thermal barrier and lining offers protection against heat from proximity to flame. In between each of these layers are pockets of air and together with the fabric layers, they help to further insulate the wearer from the extreme environments of fires.

STRUCTURAL FIRE SUITS

FB30 375

FABRIC INFORMATION

Outer shell is made of 60% Nomex® from DuPont and 40% Lenzing® FR Viscose 260g

The breathable and waterproof moisture barrier is a 50% FR knitted polyester, 50% PU membrane, 85g.

The FR thermal liner is an FR non woven aramid felt quilted to a 50% aramid, 50% viscose, 260g.

GARMENT BENEFITS

The outer shell built with DuPont™ Nomex® and with Lenzing® FR Viscose is an inherently flame-resistant fabric that stands up to heat, high abrasion resistance, strong colour fastness and protects the inner components.

The breathable PU membrane protects against external water penetration and allows body heat to escape.

The non woven thermal layer traps pockets of air to provide enhanced thermal protection and the inner woven layer protects against heat from proximity to flame.

EN 469: 2005
PROTECTIVE CLOTHING FOR FIREFIGHTERS

This European Standard specifies minimum levels of performance requirements for protective clothing to be worn during fire fighting operations and associated activities. Suits shall provide protection for the firefighters torso, neck, arms to the wrists, and leg to ankles during firefighting activities. A generous overlap suitable for all body movements shall be maintained between the jacket and trousers.

- Flame Spread
- Heat Transfer (Flame)
- Heat Transfer (Radiation)
- Residual Strength
- Heat Resistance
- Tensile Strength
- Tear Strength
- Surface Wetting
- Dimensional Change
- Resistance to penetration by Liquid Chemicals
- Resistance to Water Penetration
- Water Vapour Resistance
- Ergonomic Requirements
- Visibility – Reflex
- Whole Garment Testing (Optional)

FB31 375

EXPLAINING THE STANDARD

EN469 Level 2 Fire Suits is the higher requirement for structural fire fighting and is used by professional trained firefighters.
Level 2 Suits must include a waterproof moisture barrier

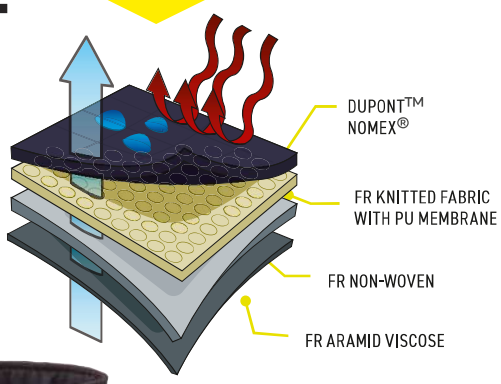
ALL LEVEL 2 FIRE SUITS WILL BE MARKED INTERNALLY AS FOLLOWS:

- Xf2 Level 2 – Performance in Heat Test: Flame.
- Xr2 Level 2 – Performance in Heat Test: Radiation.
- Y2 Level 2 - Resistance against Water Penetration
- Z2 Level 2 – Resistance against Water Vapour Resistance

STRUCTURAL FIRE SUITS

605g

LINED



MANUFACTURED IN THE EUROPEAN UNION

605g

6 UK CA CE FR.IW

FB30

3000 OVER-COAT

EN 469 LEVEL 2

60% DuPont™ Nomex®, 40% Lenzing FR Viscose, 260g
Moisture Barrier: FR Knitted fabric with PU membrane, 85g
Thermal Layer: FR non-woven
Inner Thermal Layer: FR Aramid Viscose, 260g
X Navy S-3XL

6 UK CA CE FR.IW

FB31

3000 OVER-TROUSER

EN 469 LEVEL 2

60% DuPont™ Nomex®, 40% Lenzing FR Viscose, 260g
Moisture Barrier: FR Knitted fabric with PU membrane, 85g
Thermal Layer: FR non-woven
Inner Thermal Layer: FR Aramid Viscose, 260g
X Navy S-3XL

CE CAT III

Xf2 Xr2 Y2 Z2
EN 469

CE CAT III

Xf2 Xr2 Y2 Z2
EN 469

CHEMICAL
WORKWEAR

EN 13034

GARMENT BENEFITS

This range of Chemical Resistant garments has a treatment applied to the fabric, which provides superb liquid chemical resistance protection. Enclosed pockets and covered fastenings ensure corrosion does not occur. These EN certified styles give top performance and outstanding protection to those working in industries exposed to liquid chemical hazards.

245g

SUPERB LIQUID CHEMICAL RESISTANCE PROTECTION

CR10

CR10
CHEMICAL RESISTANT JACKET
EN 13034 TYPE PB [6]

80% Polyester, 20% Cotton, 245g
Epic Royal S-3XL

245g

CR12

CR12
CHEMICAL RESISTANT BIB
EN 13034 TYPE PB [6]

80% Polyester, 20% Cotton, 245g
Epic Royal S-3XL

ESD
(ELECTROSTATIC DISCHARGE)

GARMENT BENEFITS

A build up of electrostatic discharge (ESD) can damage sensitive electronic components or give fire risks when handling solvents and other flammable materials. These garments are perfect for use in electrostatic protected areas. Conductive fibres in garments work by preventing the static charge build up by allowing it to dissipate through the conductive fibres and go to earth.

GARMENTS


NEW
565
AS24


NEW
565
AS22


566
AS20


566
AS21


567
AS11


567
AS10

HAND PROTECTION


NEW
751
A696


NEW
751
A697


NEW
750
A698


NEW
750
A699


763
A882


752
A197


752
A198


752
A199

FOOTWEAR


NEW
630
FD27


NEW
630
FD37


632
FC01


633
FC03


632
FC04


632
FT62


633
FC02


633
FW48


618
FD01


618
FD02


620
FC59

PERFECT FOR USE IN ELECTROSTATIC PROTECTED AREAS