

About Coats

We are the global market leader in apparel threads, structural components and threads for footwear, and innovative pioneers in performance materials.

We are manufacturers of sustainability-led innovative products, and trusted partner to leading brands across all three segments and multiple industries.

Headquartered in the UK, Coats is a FTSE250 company and a FTSE4Good Index constituent, Coats takes part in the UN Global Compact and is committed to science-based sustainability targets for 2030 and beyond.

Who We Are

OUR PURPOSE

Why we exist

To connect talent, textiles and technology to make a better and more sustainable world.

OUR VISION

What we are working to achieve

To be the world's leading industrial textiles company delivering innovation, digital solutions and sustainable value to all stakeholders.

OUR VALUES

Unique culture

We are collaborative. We are agile. We have a 'can do' attitude. We are passionate. We are diverse.





Flame-Resistant Solutions

Coats Flame-Resistant Solutions are designed to support the development of high-performance protective garments used in environments with elevated fire, heat, and safety risks. These include fire service suits, industrial workwear, military uniforms, and other flame-protective clothing where reliability and safety are non-negotiable.

Our flame-resistant sewing threads, reflective tapes, zippers, and other components are crafted to withstand extreme temperatures and harsh conditions—while meeting stringent global safety standards, such as EN ISO and NFPA. Whether it's arc flash protection, heat or flame resistance, Coats provides durable, dependable components that ensure garments perform under pressure.

By using innovative materials like meta-aramids, para-aramids, modacrylics, and advanced FR blends, our solutions deliver superior protection, long-term durability, and wearer comfort—without compromising on quality.

Coats Flame-Resistant Product Range:

- FR Sewing Threads
- FR Fabrics
- Sew-on Reflective Tapes
- Reflective Heat Transfers
- FR Zippers
- FR Hook & Loop Fasteners

Product Offer

HEAT & FLAME PROTECTION

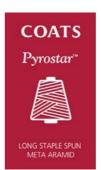
		Fire Fighters EN469 ,NFPA 1971, NFPA 1975, NFPA 1977/2112	Fire Fighters FAR 25.853 b ; EN ISO 15025, 3795 CAN/CGSB 155.22 & 20	Welding EN ISO 11611 / NFPA 2112	Industrial EN ISO 11612	Industrial EN ISO 14116	Industrial EN ISO 15797	Cut & Abrasion Protection	Military Specifications
	Coats Pyrostar	•		•	•	•			
	Coats Firefly	•		•	•	•			•
	Coats Firefly Fil	•		•	•	•			•
	Coats FlamePro	•		•	•	•		•	•
Thursda	Coats Flamemaster	•		•	•	•			•
Threads	Coats Protos Plus	•						•	•
	Coats Protos	•						•	•
	Coats Protos Fil	•						•	•
	Coats Helios C	•			•	•		•	
	Coats Helios K	•			•	•		•	•
Reflective	Signal FR Sew on Tape	•		•	•		•		
Tapes	Signal FR Heat Transfer	•		•	•		•		
Hook & Loop	Connect FR		•						•
Zips	Coats Firefly	•		•	•	•			•
	FlamePro Standard				•				
	FlamePro Comfort				•				
	FlamePro Splash			•	•				
FR Fabrics	FlamePro High Visibility				•				
	FlamePro Arc	•			•				
	FlamePro Perform	•		•	•				
	FlamePro FLX	•		•	•				

OTHER PROTECTION

		Electro Static Protection EN 1149	Electric ARC Protection NFPA 70E, EN470, EN 149-1, EN 61340, ASTM 1959	EN ISO 20471 / ANSI/ISEA 107	Chemical: Acid Protection	Chemical: Alkali Protection	Clean Room Protection: Silicone Free	Foul Weather Protection	Military Specifications
	Coats Aptan					•			
	Coats EcoVerde Epic SIF (antisil)						•		
	Coats EcoVerde Gral AWF (anti-wick)							•	
Threads	Coats EcoVerde Gral AST (anti-static)	•							
	Coats EcoVerde Dual Duty								•
	Coats EcoVerde Epic				•				•
	Coats EcoVerde Astra				•				
Reflective	Signal Sew on Tape			•					
Tapes	Signal Heat Transfer			•					
	Coats EcoVerde AWF (anti-wick)							•	•
Zips	Coats Magnet Closure								
Zips	Coats Extra Strong P								•
	Coats Total Plastic		•						
	FlamePro Standard	•							
FR Fabrics	FlamePro High Visibility			•					
	FlamePro Arc		•						
	FlamePro Perform	•							
	FlamePro FLX		•						



Sewing Threads



COATS® PYROSTAR™

Coats Pyrostar is a 100% long staple spun meta-aramid sewing thread that offers outstanding, permanent heat and flame protection up to 371°C. It is ideal for flame resistant clothing which requires very fine seams without compromising strength. It is recommended for flame resistant embroidery.



COATS® FIREFLY™

Coats Firefly is made with spun 100% meta-aramid, offering outstanding protection against heat and flame up to 371°C. Fire resistant protective garments require the highest level of security and durability to protect fire fighters, industrial workers and military combat personnel.



COATS® FIREFLY™ FIL

Coats Firefly Fil is a fire resistant 100% meta-aramid continuous filament sewing thread. This thread offers excellent thermal resistance and protective seam durability in applications exposed to high external heat.



COATS® FLAMEMASTER™

Coats Flamemaster is a polyester corespun sewing thread with a special finish that offers excellent permanent flame protection. It is available in the most extensive shade range of any flame resistant sewing thread. Its corespun technology results in superior sewing performance.

Sewing Threads



COATS® PROTOS™

Coats Protos is a high strength, high modulus fire resistant sewing thread made from 100% para-aramid fibre. Coats Protos offers exceptionally high strength retention even at elevated heat ageing temperatures and can be used to stitch durable protective seams that can withstand burning flames, ballistic resistance and exposure to high temperatures.



COATS® PROTOS™ FIL

Coats Protos Fil is a fire-resistant sewing thread made from 100% para-aramid continuous filament. This thread offers excellent thermal resistance and protective seam durability in applications exposed to high external heat.



COATS® HELIOS™ K

Coats Helios K is a para-aramid wrapped sewing thread that is specifically engineered for a variety of technical safety products. The special steel core can withstand temperatures of approximately 400°C under mechanical strain and up to 1000°C without any mechanical strain.



COATS® HELIOS™ C

Coats Helios C is a high performance sewing thread made from a steel core (steel class 1.4301 or AISI 304) with 8 to 10 steel wires wrapped with a flame resistant cotton cover. Helios C can resist temperatures of approximately 500 - 600°C without any mechanical strain and approximately 300°C under mechanical strain. The cotton cover will turn brown at temperatures between 180 – 220°C and will completely carbonise at higher temperatures.



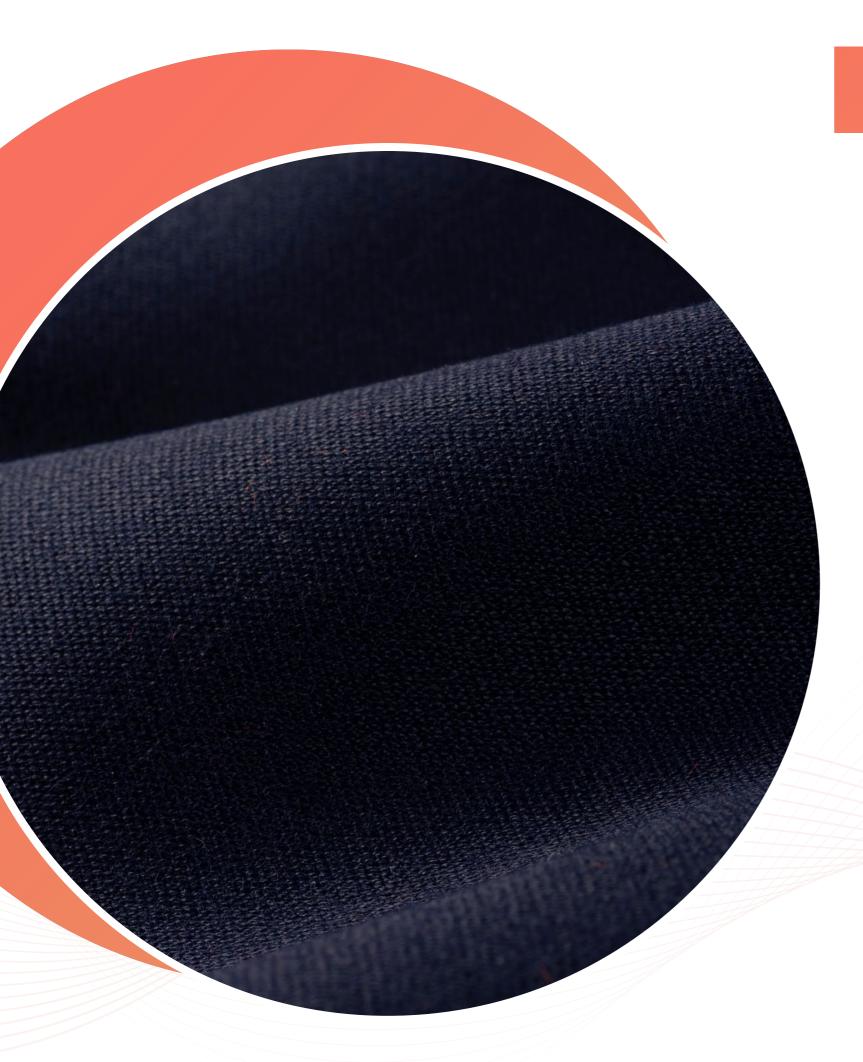
Sewing Threads

PRODUCT RANGE

	Tex	Ticket	Strength cN	Elongation % Min - Max
	40	70	1600	16 - 26
Pyrostar	70	40	2750	17 - 27
	135	20	5800	17 - 27
	24	120	618	15 - 25
	27	110	655	20 - 32
	40	75	1007	22 - 32
Firefly	60	50	1307	18 - 34
	70	40	2445	25 - 40
	90	30	2267	27 - 38
	21	140	2500	21 - 33
	40	75	1800	26 - 36
	60	50	2848	27 - 38
Firefly Fil	80	40	3802	17 - 35
	80	40	6666	20 - 37
	120	25	5320	24 - 34
	135	25	6251	22 - 32
	30	100	1490	17 - 22
Flamemaster	40	70	1960	18 - 24
	70	40	3040	18 - 25

	Тех	Ticket	Strength cN	Elongation % Min - Max
	40	75	3000	3 - 5
	45	60	10500	3 - 5
	50	60	4444	2 - 6
Protos	60	50	4800	3 - 5
PIOLOS	70	40	4600	2 - 6
	80	40	6000	3 - 5
	90	30	18000	2 - 6
	105	30	20100	2 - 6
	40	75	6665	3 - 5
	80	40	13790	3 - 5
	90	30	13345	3 - 5
	90	30	18000	3 - 5
	90	30	6140	3 - 5
	90	30	49800	3 - 5
Protos	135	20	27000	3 - 5
Fil	135	20	20260	3 - 5
	150	20	25800	3 - 5
	150	20	28000	3 - 5
	210	15	64000	3 - 5
	350	10	50400	3 - 5
	500	6	84000	3 - 5
	700	5	95000	3 - 5
	120	24	2500	7 - 10
Helios C	150	18	2100	15 - 25
	210	13	2700	8 - 18
Helios V	90	30	8890	4 - 6
Helios K	210	13	6000	6 - 10

COATS | FLAME-RESISTANT SOLUTIONS ENGINEERED TO DELIVER



Fabrics



COATS® FLAMEPRO™ STANDARD

Coats FlamePro Standard is a superior, inherently flameresistant solution meticulously crafted from Modacrylic fiber blends. Engineered for safeguarding against heat, flame, and thermal hazards, it stands as the ultimate choice for demanding environments.



COATS® FLAMEPRO™ PERFORM

Coats FlamePro Perform is made with a unique FR blend and delivers outstanding flame resistance for keeping stability under high temperatures. The inherent thermal protection ensures no shrinkage occurs, while dope dyed fibres provide light and color fastness against laundry. From heat-blocking outer shell fabric for firefighters to protection against fatal hazards, FlamePro Perform is ideal for a range of applications requiring excellent durability against heat pulses and fire explosions.



COATS® FLAMEPRO™ COMFORT

Coats FlamePro Comfort offers the perfect combination of ergonomic design and excellent protection against thermal hazards. Suited for a variety of applications that may lead to Heat, Flame and Thermal protection, this innovative fabric keeps the skin cool and dry for maximum comfort.



COATS® FLAMEPRO™ SPLASH

Coats FlamePro Splash is a metal molten splash protective fabric that is specially engineered to be lightweight, soft and flexible while maintaining durability for long lasting year. This fabric ensures excellent protection against radian heat, flame, metal splash and other smelting hazards due to its thermal resistant and metal-shedding design. Flamepro Splash has good wash fastness and is durable during and after laundry which increases the life of the garment and therefore return on investment.

Fabrics



COATS® FLAMEPRO™ FLX™

Coats FlamePro FLX is an innovative fabric for personal protective equipment, specifically engineered to be soft, flexible and comfortable. It offers the perfect combination of ergonomic design and excellent protection against thermal hazards. Suitable for a range of applications, this flexible fabric gives its wearer freedom of movement while delivering ultimate protection.



COATS® FLAMEPRO™ ARC

The breakthrough innovation from Coats, FlamePro Arc – an inherently flame-resistant fabric that offers multi-norm protection against Arc Flash, Heat, and Flame, meeting industry safety requirements. It provides HRC 2 Arc Protection despite its lightweight design. It not only prioritizes comfort with lightweight workwear for enhanced mobility but also delivers exceptional color durability, ensuring long-lasting wear and outstanding value.



COATS® FLAMEPRO™ HIGH VISIBILITY

Coats FlamePro High Visibility is an inherently flame resistant and high-visibility certified fabric that is one of the lightest fabrics of its kind. The innovative construction of FlamePro High Visibility allows for improved comfort and asthetics while meeting EN ISO safety norms. It offers you the same superb protection without compromise on performance or comfort.





Fabrics

PRODUCT RANGE

Product	Weight g/m²	Fabric Type	Width cm
	180 ±5%	Twill	150
FlamePro Standard	200 ±5%	Ripstop	152
riamerio Standard	240 ±5%	Ripstop	152
	375 ±5%	Twill	152
	150 ±5%	Plain	152
Flama Dua Daufa una	200 ±5%	Twill	152
FlamePro Perform	200 ±5%	Ripstop	152
	200 ±5%	Ripstop	152
	120 ±5%	Plain	152
	150 ±5%	Plain	152
FlamePro Comfort	170 ±5%	Twill	152
	180 ±5%	Twill	152
-	200 ±5%	Twill	152
Flama Dua Gula ah	310 ±5%	Sateen	160
FlamePro Splash	340 ±5%	Sateen	160
FlamePro FLX	205±5%	Twill	155
FlamePro Arc	194 ±5%	Twill Weave	152
	205 ±5%	2/1 Twill	160
FlamePro High Visibility	250 ±5%	Ripstop	160
-	250 ±5%	Ripstop	160

17 COATS | FLAME-RESISTANT SOLUTIONS ENGINEERED TO DELIVER 1

Reflective Sew-On Tapes & Heat Transfers

COATS® SIGNAL™

Coats Signal offers a global selection of high-quality reflective tapes tailored for workwear, protective clthing, apparel, and accessories. These tapes, when illuminated by a light source, enhance visibility during nighttime or adverse weather conditions. Complemented by fluorescent elements, Signal tapes also enhance visibility in daytime and low light situations.

Signal products surpass the requirements of key high-visibility regulations, ensuring optimal performance. Designed for durability, our premium retroreflective tapes are engineered to withstand tough industrial laundry conditions, enduring up to 70 cycles, including tunnel drying at temperatures of 160°C.

Our range encompasses various products, including Sew-on Tapes for Domestic and Industrial Wash, Heat Transfers for both domestic and industrial use, Flame Resistant and Flame Retardant Sew-on Tapes, Heat Transfers, as well as Piping and Elastic Sew-On products.





Sew-On Tapes

FLAME RESISTANT AND FLAME RETARDANT Sew-on tapes for domestic and industrial wash

Coats Signal premium flame resistant and flame retardant retro reflective tapes are designed for maximum heat and flame protection, for great visibility and resistance to extreme conditions. These products are certified according to European, US and Australian protective clothing standards. Coats Signal retro reflective tapes are made of flame retardant cotton or meta-aramid and have been designed to withstand industrial washing.

22

APPLICATIONS

- Heat and flame protective clothing for firefighters
- Heat and flame protective clothing for industrial applications

Sew-On Tapes

TECHINAL DATA

Article		C422100	C42210P	C422310	C422810
Daytime colour				Yellow/Silver	Yellow
		Silver	Silver	Red/Silver	Red
Feature			Perforated		
Backing		FR cotton	FR cotton	FR cotton	FR cotton
Retro-reflective po (cd/lux/m²)	erformance	500	500	500	75
60°C Domestic wa	sh ISO 6330	100	100	60	30
75°C Industrial wa 15797,method 8 t and tunnel dry		50	50		
Dry clean ISO 317	5	50	50	50	30
EN ISO 20471 / EN	I 469	•	•	•	•
EN ISO 15384				•	•
ANSI/ISEA 107		•	•	•	•
NFPA 1971 / 1977	/ 2112	•	•		
NFPA 1951					
CAN/CGSB 155.22 CAN/CGSB 155.20					
STANDARD 100 B	Y OEKO-TEX®	•	•	•	•
Standard width (other widths	50mm	•	•	•	•
available upon request)	75mm			•	•
Make-up (standard width)	Meter / Roll	100	100	50	50

C412300	C41230P	C412400	C412500	C412500- 00003	C41250P
Yellow/Silver Red/Silver	Yellow/Silver Red/Silver	Yellow/Silver	Silver	Dark Grey	Silver
Orange/Silver	Orange/Silver				
	Perforated				Perforated
M-aramid	M-aramid	M-aramid	M-aramid	M-aramid	M-aramid
500	500	500	500	500	500
60	60	60	100	100	100
			50	50	50
50	50	50	50	50	50
•	•	•	•	•	•
•	•	•	•	•	•
•	•		•	•	•
•*	•*	•	•	•**	•
•*		•	•		
•*		•	•		
•	•	•	•	•	•
•	•	•	•	•	•
•	•	•			
100	100	100	100	100	100

^{*}Only for Yellow/Silver and Orange/Silver

**Only NFPA 2112

TECHNICAL DATA

Article		C412800	C41280P
Daytime colour		Yellow	Yellow
		Orange	Orange
Feature			Perforated
Backing		M-aramid	M-aramid
Retro-reflective performa (cd/lux/m²)	nce	125/75	125/75
60°C Domestic wash ISO 6	5330	60	60
Dry Clean ISO 3175		50	50
EN ISO 20471 / EN 469		•	•
EN ISO 15384		•	•
ANSI/ISEA 107		•	•
NFPA 1971 / 1977 / 2112			
NFPA 1951			
CAN/CGSB 155.22 / CAN/CGSB 155.20			
STANDARD 100 BY OEKO	-TEX®		
Standard width (other widths available upon request)	50mm	•	•
Make-up (standard width)	Meter / Roll	100	100





Heat Transfers

FLAME RESISTANT AND FLAME RETARDANT Heat transfers for domestic and industrial wash

Coats Signal premium flame retardant retro reflective heat transfers are designed for maximum heat and flame protection, for great visibility and resistance to extreme conditions. These products are certified according to global protective clothing standards. Retro reflective silver grey heat transfers are designed to withstand industrial washing.

APPLICATIONS

- Heat and flame protective clothing for firefighters
- Heat and flame protective clothing for industrial applications

Heat Transfers

TECHINAL DATA

Article		C522100	C52210S	C52230S	C52250S
Daytime colour		Silver	Silver	Yellow/Silver Orange /Silver	Yellow/Silver
Feature			Segmented	Segmented	Segmented
Backing		FR polymer film	FR polymer film	FR polymer film	FR polymer film
Retro-reflective performance (cd/	/lux/m²)	500	400	400	400
60°C Domestic wa ISO 6330	ash	100	100	60	50
75°C Industrial was 15797, method 8 dry and tunnel d	tumble	50	50		
Dry clean ISO 317	' 5	50	50	50	50
EN ISO 20471 / EN	N 469	•	•	•	•
EN ISO 15384		•	•	•	•
ANSI/ISEA 107		•	•	•	
NFPA 1971 / 1977	/ 2112		•	•	
NFPA 1951				•*	
CAN/CGSB 155.22 CAN/CGSB 155.20					
STANDARD 100 B OEKO-TEX®	Υ	•	•	•	•
Standard width (other widths	50mm	•	•	•	•
available upon request)	75mm			•	•
Make-up (standard width)	Meter / Roll	200	200	100	100

^{*}Only for Orange/Silver





TECHNICAL DATA

Article		C522800	C52280S
Daytime colour		Yellow	Yellow
		Orange	Orange
Feature			Segmented
Backing		FR polymer film	FR polymer film
Retro-reflective performa (cd/lux/m²)	nce	125	100
60°C Domestic wash ISO	6330	60	60
Dry clean ISO 3175		50	50
EN ISO 20471 / EN 469		•	•
EN ISO 15384		•	•
ANSI/ISEA 107		•	•
NFPA 1971 / 1977 / 2112			
NFPA 1951			
CAN/CGSB 155.22 / CAN/CGSB 155.20			
STANDARD 100 BY OEKO	-TEX®	•	•
Standard width (other widths available upon request)	50mm	•	•
Make-up (standard width)	Meter / Roll	200	200

31 COATS | FLAME-RESISTANT SOLUTIONS ENGINEERED TO DELIVER 32

Zippers

Flame resistant & retardant zipper for different applications

FR types	Material	Applications	EU Std.	US Std.
Coats Flame Resistant (Firefly Zipper)	Meta-aramid yarn	 Heat and flame protective clothing for firefighters Heat and flame protective clothing for industrial applications 	EN469 EN11611 EN11612 EN14116	NFPA1971 NFPA 1977 NFPA 1975 NFPA 1951 NFPA 2112 16CRF 1633
Coats Flame Retardant	Chemical treated	WorkbootsAutomotive interior	95/28/EC ECE R118 BS7177 BS5807	FMVSS 302



Zippers

FIREFLY ZIPPER

For domestic and industrial wash

Coats Firefly Zipper is developed for maximum heat and flame protection to extreme conditions. Tape of these products is made of Meta-aramid yarn. Plastic teeth is made of special high temperature plastic. Both materials are with permanent flame resistant property to withstand industrial washing.

APPLICATIONS

- Heat and flame protective clothing for firefighters
- Heat and flame protective clothing for industrial applications

Article	Me	etal	Pla	stic	
Size	5	8	5	8	
Function type	Clos	e end / Open e	nd / 2 way open	end	
Slider type		Zinc alloy auto	olock / Nonlock		
60°C Domestic wash ISO 6330	No c	hange on fire re	esistant perform	ance	
75°C Industrial wash ISO 15797, method 8 tumble dry and tunnel dry	No change on fire resistant performance				
Dry clean ISO 3175	No c	hange on fire re	esistant perform	ance	
Heat-resistance		260	O °C		
EN 469	•	•	•	•	
EN ISO 15384	•	•	•	•	
NFPA 1971 / 1977 / 2112	•	•	•	•	
NFPA 1975	•	•	•	•	
NFPA 1951	•	•	•	•	
CAN/CGSB 155.22 / CAN/CGSB 155.20	•	•	•	•	
STANDARD 100 BY OEKO-TEX®	•	•	•	•	





37

FLAME RETARDANT ZIPPER

Coats Flame Retardant Zipper is developed for heat and flame protection for automotive interior and mattress. Both tape and teeth are chemical treated to resists ignition, slows flame spread, and ensures long-lasting protection.

APPLICATIONS

- Mattress
- Workboots
- Automotive interior

Article	Sp	iral		Coil		
Size	5	8	5	8	10	
Function type	Close end / Open end / 2 way open end					
Slider type	Zinc alloy autolock / Nonlock					
95/28/EC	•	•	•	•	•	
ECE R118	•	•	•	•	•	
BS7177	•	•	•	•	•	
BS5807	•	•	•	•	•	
FMVSS 302	•	•	•	•	•	
STANDARD 100 BY OEKO-TEX®	•	•	•	•	•	
			THAN .	W	(XYA) / / /	



COATS® CONNECT™

Hook & Loop Fasteners

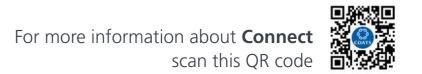
Coats Connect hook and loop fasteners is part of our range of high quality trim products. Connect has been developed in cooperation with leading suppliers and textiles manufacturers and can be used in a multitude of applications.

With our research and development capabilities we are able to provide optimum and customised solutions that meet our customer's product and process requirements. In addition to the many widths and shades available in our standard Connect offer, we have a portfolio of products such as adhesive, flame retardant and elastic hook and loop fasteners to meet the particular and specialised needs of our customers.

TECHNICAL DATA

Article	Flame Retardant		
Hook article code	FAH1402		
Loop article code	FAL1402		
Substrate	100% Polyamide		
Construction	Woven		
Standard widths*	16 mm 20 mm 25 mm 30 mm 38 mm 50 mm 100 mm		
Certifications OEKO-TEX® STANDARD 100, Product Class I	•		
EN ISO15025 (limited flame spread)	•		
ISO 17493 (Heat resistance)	•		
Washing instructions	$\swarrow 407 \otimes \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$		
Standard length Meter / Flange	25		

^{*}Other widths available upon request



Our Sustainability Strategy

We are dedicated to integrating sustainability into our operations, continuously improving our environmental, social, and governance practices and this is reflected in our strategy and the short-, medium-, and long-term targets we have set.



Energy

We reduce carbon emissions through more efficient use of energy and transitioning to renewable sources whenever they become available. This is our crucial contribution to combat climate change.



Materials

With Coats EcoVerde we are driving the material transition away from virgin oil-based sewing threads. And we are on target to achieve 60% sustainable materials by 2026.



Water

The colouration or dyeing process is where we use the most water in our operations. We take great care of water resource by reducing our water intensity and through the installation of water recycling facilities.



Waste

Through all our processes we ensure that we recover, re-use and recycle as much material as possible. Where residual waste product is unavoidable, the waste is processed responsibly and always with the smallest impact on the environment.



People

We have a responsibility to employees, their families, our communities and all the people in our wider supply chain who touch our business. Through policies, programmes and community events, we ensure that safety, wellbeing, fairness, equality, diversity and opportunity are always top of mind for everyone.





Coats Expertise

Pioneering Solutions for Flame Resistant Clothing

With our global expertise, innovative solutions, and technical support, Coats can help you meet your current and future needs. We offer a wide range of products that will enhance the quality of your products.



For more information visit www.coats.com

Since conditions and applications vary considerably in the use of a product, the customer and/or user should assure herself or himself that the product meets end customer requirements and is suitable for the intended end use. Coats® accepts no liability for unsuitable or improper use or application of products. Information provided above is based on current averages and should be taken only as indicative. Coats® accepts no liability for the preciseness and correctness of the information provided. Brochures are updated for time to time, please be sure you are referring to the most recent publication.

Coats® supports customers with advice on individual applications on request; if you have any questions or concerns, please contact us. Coats® is a registered trademark of J. & P. Coats, Limited. All brands mentioned in this brochure are trademarks of J. & P. Coats, Limited. © Copyright reserved 2025.