FRISTADS

### EPD — ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH ISO 14025 FOR: GREEN SHELL JACKET 4922 GRS AND AIRTECH® ZIP-IN JACKET 4011 GTC

#### **GENERAL INFORMATION**

#### **OWNER OF THE EPD:**

Fristads AB Prognosgatan 24, 501 11 Borås, Sweden Contact person: Lene Jul, Product Management Director, lene.jul@fristads.com www.fristads.com

NAME AND LOCATION OF PRODUCTION SITE:

Madagascar

PROGRAMME:

The International EPD® System www.environdec.com

PROGRAMME OPERATOR:

**EPD International AB** 

EPD REGISTRATION NUMBER: S-P-01762 **PUBLICATION DATE:** 

2020-03-04

VALIDITY DATE:

2025-03-04

**GEOGRAPHICAL SCOPE:** 

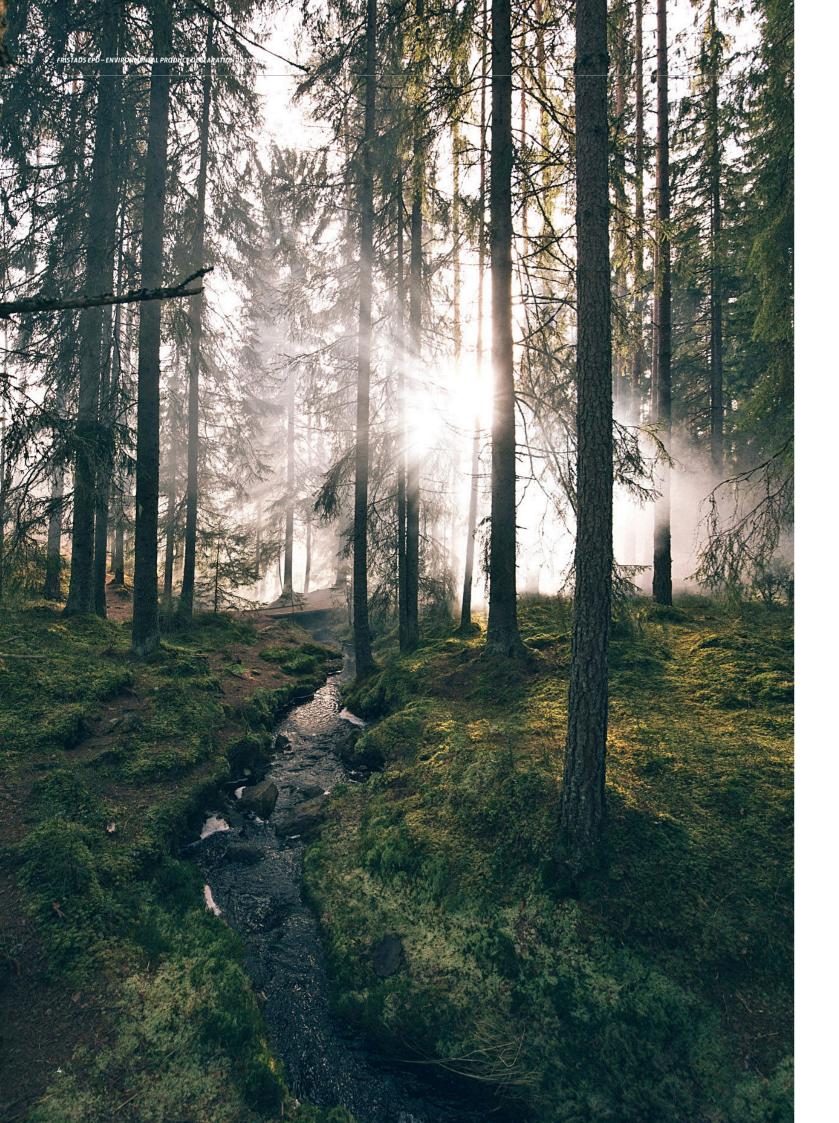
Prepared with the assistance of RISE AB.

# A GREEN REVOLUTION

Fristads is the first company in the world to measure the environmental impact of clothes. Fristads Green is a concept of workwear where the entire manufacturing chain is characterized by environmental awareness and innovation to minimize the footprint on the environment. We started with a collection for craftsmen, but our aim is to make the Green concept a part of every product segment within coming years.

#### EPD – ENVIRONMENTAL PRODUCT DECLARATION

Fristads Green products have a certified Environmental Product Declaration (EPD) giving information about the environmental performance, contents and recycling, which has been controlled and verified according to the requirements of the International EPD® System. More information is available at environdec.com. The EPD registration numbers are displayed in connection to the products.



# **COMMITTED TO SUSTAINABILITY**

In 2019 Fristads became the first clothing producer in the world to introduce a new standard for measuring the total environmental impact of a garment – from choice of material to delivery of the finished garment.

With three own factories in Europe and sales in more than 20 countries, there are many people around the world working for us – and we care for each and every one of them. These are fine words of course, and we stand firmly behind them. Injustices, unreasonable working hours, low wages, corruption – these are all issues that we resist, where we are constantly on our guard. We work hard to exert our influence wherever our products are made.

We have set high requirements for the companies that want to be our suppliers, at all stages. We give consideration to all the details in the chain, from human rights to environmental impact. It's our duty.

Our work with sustainability is based on the 10 principles in the UN's Global Compact, which forms the basis for our Code of Conduct. We respect and promote human rights according to the United Nations Declaration of Human rights and the Core Conventions of the International Labour Organisation. As a member of amfori BSCI (Business Social Compliance Initiative), we pursue a constructive and open dialogue among our business partners and stakeholders to reinforce the principles of a socially responsible business.

We are certified according to ISO 14001 and work constantly to improve our environmental performance. We monitor the use of chemicals in our products throughout our supply chain. Our Restricted Substance List, shared among all suppliers, reflects the latest EU harmonized legislation which includes REACH, pops regulation, Biocide Regulation and Product Safety Regulation, and is updated regularly based on the guidance of our partner RISE, the Swedish Chemical Group. Furthermore, most of our products are OEKO-TEX® certified.

These efforts are rarely visible from the outside. But, we know they make a difference. For this reason, they are extremely important for us as we strive to make a better world to live in, a world we can proudly leave for the generations that follow us.

Read more at fristads.com.



HUMAN RIGHTS, LABOUR, ENVIRONMENT, ANTI-CORRUPTION



SOCIAL COMPLIANCE







FRISTADS EPD—ENVIRONMENTAL PRODUCT DECLARATION 2020

# EPD)

ENVIRONMENTAL PRODUCT DECLARATION

By developing an EPD, Fristads aims to contribute to positive change and greater transparency when it comes to environmental impact.

garments in the world. Fristads

line with an Environmental

Product Declaration (EPD).

Green is the world's first clothing



## THE WORLD'S FIRST EPD FOR CLOTHING

Fristads objective is to contribute to a longterm, sustainable and transparent measuring tool for environmental impact – a standard that can be used throughout the textile industry.

An Environmental Product Declaration (EPD) is an independently verified and registered document that communicates transparent and comparable information about the life cycle environmental impact of products. The relevant standard for Environmental Product Declarations is ISO 14025, where they are referred to as "Type III environmental declarations". A Type III environmental declaration is created and registered in the framework of a programme, such as the International EPD® System.

The International EPD® System has, as a main objective, the ambition to enable and support organisations in any country to communicate quantified environmental information on the life cycle of their products in a credible, comparable, and understandable way. All EPDs registered in the International EPD® System are publically available and free to download on this website: www.environdec.com.

All EPDs are based on Product Category Rules providing rules, requirements, and guidelines for a defined product category. The overall goal of an EPD is to provide relevant and verified information to meet the communication needs in the various applications: procurement, ecodesign or environmental management systems. An important aspect of EPD is to provide the basis of a fair comparison of products and services by its environmental performance. EPDs can reflect the continuous environmental improvement of products and services over time and are able to communicate and add up relevant environmental information along a product's supply chain.











FRISTADS EPD – ENVIRONMENTAL PRODUCT DECLARATION 2020 FRISTADS EPD – ENVIRONMENTAL PRODUCT DECLARATION 2020

#### THE WORLD'S FIRST SHELL JACKET **WITH AN EPD**

Most of the buttons are made of raw finished metal alloy, using a metal treatment method that cuts water consumption Detailing made of recycled polyester Zippers partly made of recycled polyester Clean design involving minimal details and smart solutions; saves energy in production and facilitates recycling of the material Polyester membrane - facilitates recycling of main fabric Made of recycled polyester. The polyester is dyed using the e-dye® system which reduces water consumption by 75% Outline logo embroidery made with stitches to reduce sewing time and thread usage All surplus material from production is utilised on site and turned into new products like "comfort pads" for knees and elbows and into socks and blankets The design utilises that the front zipper can be easily replaced if it breaks in order to prolong the life of the garment











#### **GREEN SHELL JACKET 4922 GRS**

Part of Fristads Green collection / Breathable, wind and waterproof / Full length front zip with concealed snap fastening / Adjustable hood with drawstring / Raglan sleeves / 1 chest pocket with zip / 2 front pockets with zip / Elastic inner cuff / Extended back / e.dye® / With EPD (Environmental Product Declaration) / Approved according to EN 343 / Approved according to EN 342 together with jacket 130806 / OEKO-TEX® certified.

MATERIAL 100% recycled polyester. Lining 100% recycled polyester. WEIGHT 185 g/m², lining 70 g/m². COLOUR 940 Black. SIZE XS-4XL.

#### **GREEN SHELL JACKET 4922 GRS AND** AIRTECH® ZIP-IN JACKET 4011 GTC

The Green Shell jacket 4922 GRS and Airtech® Zip-in jacket 4011 GTC are both constructed from a main fabric made of polyester.

GARMENT NAME	STYLE NO	DESCRIPTION
Green Shell jacket 4922 GRS	129667	Jacket: Green collection, dope dyed recycled polyester
Airtech® Zip-in jacket 4011 GTC	126430	Jacket: comparison product, polyester







**AIRTECH® ZIP-IN JACKET** 4011 GTC Art no 126430

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### LCA INFORMATION

#### - LIFE CYCLE ASSESSMENT

Life Cycle Assessment is a method for analysing the environmental impact of a product throughout its life-cycle, from the extraction of raw materials (the cradle) to handling the waste (the grave).

#### **GOAL OF THE STUDY**

An LCA study has been conducted in accordance with ISO 14044 and the requirements stated in the General Programme Instructions by The International EPD® System<sup>1</sup>.

The goal of the present LCA study has been to calculate environmental impact values for Fristads' Green Shell jacket 4922 GRS and Airtech® zipin jacket 4011 GTC to create this Environmental Product Declaration, to be used for communicating environmental performance to customers.

#### **SCOPE OF THE STUDY**

The scope of this study is cradle to gate and includes all processes up until the jacket is manufactured, see Figure 1. All material and resource consumption is tracked back to the point of raw material extraction, mainly by using cradle-to-gate data<sup>2</sup> from the Ecoinvent database. The functional unit of the study is 1 (one) garment, in accordance with the Product Category Rules (PCR)3.

#### **DATA COLLECTION**

The inventory for the LCA study was carried out during 2019, collecting data for 2018 and 2019. The data for the textile processing is provided by the Fristads' suppliers. Data for confectioning was collected by Fristads' staff.

#### **ALLOCATION**

Whenever it has been necessary to partition the system inputs and outputs, mass criteria have been used in accordance with the PCR. Such situations have for example been when the share of energy and water consumption of an entire production plant has been allocated to the specific fabric based on the total production volume (mass) of the plant.

#### **CUT-OFF RULES**

The PCR states that life cycle inventory data for a minimum of 99 % of total inflows to the three life cycle stages (up-stream, core and downstream modules) shall be included and a cut-off rule of 1% regarding energy, mass and environmental relevance shall apply.

#### **ASSUMPTIONS AND LIMITATIONS**

Some general assumptions have been made around transport vehicles to enable use of database data from Ecoinvent to represent primary data. Country electricity mix datasets have been used for electricity when the site reports that they use the country electricity net.

Generally, the LCA data should be used with precaution if interpreted for any other purpose than this EPD.

#### **DATA OUALITY**

The data quality has been considerably increased by the experience from making a similar study in the past<sup>5</sup>

#### **ADDITIONAL INFORMATION ABOUT THE LCA STUDY**

#### **TIME REPRESENTATIVENESS:**

2018-2019

#### DATABASE(S) AND LCA SOFTWARE USED:

SimaPro version 9.0.0.486 ecoinvent version 3.57

#### **CALCULATION METHODS**

Resource use values are calculated from Cumulative Energy Demand V1.10. Potential environmental impacts are calculated with the EPD (2018) v1.00 method as implemented in SimaPro: CML-IA baseline v3.05 for eutrophication, global warming, ozone depletion and abiotic resource depletion; CML-IA non baseline method for acidification; AWARE v1.02 for water scarcity and ReCiPe 2016 Midpoint (H) v1.1 for photochemical oxidation. For global warming potential, the default characterization factors are the IPCC (2013) factors as implemented in CML baseline method. However, the latter does not provide the same resolution in EPD (2018) V1.00 as is specified in the EPD template (fossil, bio-based respective land use and land transformation), wherefore instead the method Greenhouse Gas Protocol V1.02 is used.

#### **DESCRIPTION OF SYSTEM BOUNDARIES:**

cradle-to-gate

#### **LCA PRACTITIONER:**

Sandra Roos RISE PO Box 104, SE-431 22 Mölndal, Sweden

#### THIRD PARTY REVIEWER:

Marcus Wendin, Miljögiraff AB, Övre Hövik 25b, SE-430 84 Göteborg, Sweden

#### FPD International, "General Programme Instructions for the International FPD® System Version 3.0" (Stockholm, Sweden, 2017), www.environdec.com

#### <sup>6</sup> PRé Consultants, "SimaPro 9.0" (PRé Consultants, 2019), http://www.pre-sustainability.com/simapro

#### SYSTEM DIAGRAM

The system boundaries of this EPD are decided by the Product Category Rules (PCR) and illustrated by Figure 1.

Garment manufacturing, retail, use and end-of-life processes are not included. The only downstream process included in the system boundary, the transport to the customer, was found to give a negligible contribution to the environmental impact (<1% for all categories). Therefore, the downstream phase is not reported separately.

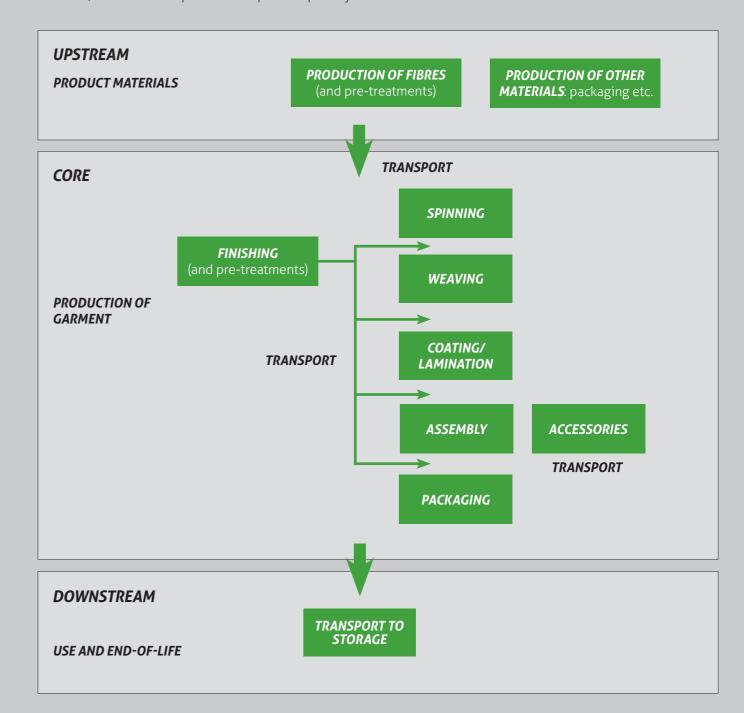


Figure 1. The system boundaries include upstream, core and downstream processes

<sup>&</sup>lt;sup>2</sup> Cradle-to-gate = all processes from cradle (mining site, forest etc.) to gate (until the goods is produced and ready for delivery at the factory gate).

<sup>3</sup> EPD International, "PCR 2019;04 Jackets, coats and other similar outdoor garments: UN CPC 282. Product Category Rules According to ISO 14025. Version 1.01' (2019).

<sup>4</sup> Ecoinvent, "Ecoinvent" (Zurich, Switzerland: Ecoinvent, 2019), https://www.ecoinvent.org/database/database.html.

<sup>&</sup>lt;sup>5</sup> EPD International, 'EPD GREEN CRAFTSMAN JACKETS 4538 GRN AND JACKET 4555 STFP. EPD Registration Number S-P-01534.' (2019)

<sup>&</sup>lt;a href="http://www.environdec.com/en/Detail/epd710#.VVxl]2cw-M8>.">http://www.environdec.com/en/Detail/epd710#.VVxl]2cw-M8>.</a>

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#### **PRODUCT CHARACTERISTICS**

The product characteristics are presented in the table below.

#### **PRODUCT CHARACTERISTICS**

CHARACTERISTIC	TEST METHOD	RESULTS GRS	RESULTS GTC	
COMPOSITION	Regulation EU No 1007/2011	100% Polyester	100% Polyester	
FABRIC	ISO 3572	Weft rib	Twill 2/1 Z	
MASS PER UNIT AREA	EN 12127	0.185 kg/m²	0.235 kg/m²	
WIDTH	EN 1773	149 cm	150 cm	
ABRASION STRENGTH	ISO 12947-2	Exceeds 100.000 cycles 12 kPa	Exceeds 100.000 cycles 12 kPa	
TEAR STRENGTH	ISO 13937-2	Warp: 65 N Weft: 63 N	Warp: 90 N Weft: 100 N	
TENSILE STRENGTH	ISO 13934-1	Warp: 1300 N Weft: 750 N	Warp: 1200 N Weft: 1000 N	
SEAM SLIPPAGE	ISO 13936-2	2 mm	3 mm	
PILLING TEST (MARTINDALE) AFTER 5000 RUBS	EN ISO 12945-2	5	5	
DIMENSIONAL CHANGE TO WASHING	EN ISO 6330 EN ISO 3759 EN ISO 5077	Lengthwise: +/-3% Widthwise: +/-3%	Lengthwise: +/-3% Widthwise: +/-3%	
PH OF WATER EXTRACT	EN ISO 3071	5.7	6.7	
COLOUR FASTNESS TO ARTIFICIAL LIGHT: XENON ARC FADING LAMP TEST	EN ISO 105 B02	6	6	
COLOUR FASTNESS TO WASHING	EN ISO 105 C06	Colour change: 5 Colour staining: Acetate: 5 Cotton: 5 Nylon: 4 Polyester: 5 Acrylic: 5 Wool: 5	Colour change: 5 Colour staining: Acetate: 5 Cotton: 4-5 Nylon: 4-5 Polyester: 4-5 Acrylic: 5 Wool: 5	
ACID AND ALKALINE PERSPIRATION	EN ISO 105 E04	Acid: Colour change: 5 Colour staining: Acetate: 5 Cotton: 5 Nylon: 4-5 Polyester: 5 Acrylic: 5 Wool: 5  Alkaline: Colour change: 5 Colour staining: Acetate: 5 Cotton: 5 Nylon: 4-5 Polyester: 5 Acrylic: 5 Wool: 5	Acid: Colour change: 5 Colour staining: Acetate: 5 Cotton: 5 Nylon: 4-5 Polyester: 5 Acrylic: 5 Wool: 5  Alkaline: Colour change: 5 Colour staining: Acetate: 5 Cotton: 5 Nylon: 4-5 Polyester: 5 Acrylic: 5 Wool: 5	
DRY AND WET RUBBING	EN ISO 105 X12	Dry: 4-5 Wet: 4	Dry: 3-4 Wet: 3-4	

#### **CONTENT DECLARATION**

#### **GREEN SHELL JACKET 4922 GRS SIZE L**

MATERIALS	UNIT	%	ENVIRONMENTAL / HAZARDOUS PROPERTIES
Fabric T11946 Real Sustain		73%	100% recycled polyester
Fabric TAFR		20%	100% recycled polyester
Fabric GRR		3%	97% recycled polyester, 3% elastane
Thread polyester		~ 0%	100% polyester
Care and size labels		2%	100% polyester
Paper trims		2%	100% paper

#### **AIRTECH® ZIP-IN JACKET 4011 GTC SIZE L**

MATERIALS	UNIT	%	ENVIRONMENTAL / HAZARDOUS PROPERTIES
Fabric GTC		55%	100% polyester
Fabric GTT		5%	100% polyester
Trims for pockets		14%	100% polyester
Fabric TAFTA		12%	100% polyester
Polyester knit trims		11%	100% polyester
Thread polyester		~ 0%	100% polyester
Care and size labels		2%	100% polyester
Paper trims		1%	100% paper

#### **PACKAGING**

Distribution packaging: Cardboard box

#### **RECYCLED MATERIAL**

Provenience of recycled materials (pre-consumer or post-consumer) in the product:

The claim that the mechanical recycled polyester fibre is made with recycled materials is certified by third parties: Scientific Certification Systems (SCS Certification) as well as the Global Recycled Standard.

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#### **ENVIRONMENTAL PERFORMANCE**

The only downstream process included in the system boundary, the transport to the customer, was found to give a negligible contribution to the environmental impact (<1% for all categories). Therefore, the downstream phase is not reported separately but is included in the total figure.

#### POTENTIAL ENVIRONMENTAL IMPACT

PARAMETER		UNIT	JACKET	UPSTREAM	CORE	TOTAL
Global warming potential	Fossil	kg CO <sub>2</sub>	4922 GRS	3.99	6.62	10.85
(GWP)		eq.	4011 GTC	11.40	12.20	23.84
	Biogenic	kg CO <sub>2</sub>	4922 GRS	0.51	0.30	0.81
		eq.	4011 GTC	0.72	0.70	1.42
	Land use and land	kg CO <sub>2</sub>	4922 GRS	0.01	0.03	0.03
	transformation	eq.	4011 GTC	0.04	0.05	0.09
	TOTAL	kg CO <sub>2</sub>	4922 GRS	4,25	6,72	11,28
		eq.	4011 GTC	11,63	12,44	24,38
Acidification potential (AP)		kg SO <sub>2</sub>	4922 GRS	0,02	0,03	0,05
			4011 GTC	0,05	0,05	0,11
Eutrophication potential (EP)		kg PO <sub>4</sub> <sup>3-</sup>	4922 GRS	0,01	0,01	0,01
			4011 GTC	0,01	0,01	0,03
		kg NMVOC	4922 GRS	0,01	0,02	0,04
			4011 GTC	0,04	0,03	0,07
Water scarcity potential		m³ eq.	4922 GRS	1,25	1,98	3,27
			4011 GTC	6,00	5,01	11,03

#### **USE OF RESOURCES**

PARAMETER		UNIT	JACKET	UPSTREAM	CORE	TOTAL
Primary energy resources –	Use as energy carrier	MJ, net calorific	4922 GRS	6,5	9,0	15,5
Renewable		value	4011 GTC	15,5	14,1	29,6
	Used as raw materials	MJ, net calorific	4922 GRS	0	0	0
		value	4011 GTC	0	0	0
	TOTAL	MJ, net calorific	4922 GRS	6,5	9,0	15,5
		value	4011 GTC	15,5	14,1	29,6
Primary energy resources –	Use as energy carrier	MJ, net calorific value	4922 GRS	56,7	75,8	137,4
Non-renewable			4011 GTC	227,3	141,2	373,4
	Used as raw materials	MJ, net calorific value	4922 GRS	2,99	0,70	3,69
			4011 GTC	54,13	0,00	54,13
	TOTAL	MJ, net calorific value	4922 GRS	59,7	76,5	141,1
			4011 GTC	281,4	141,2	427,5
Secondary material		kg	4922 GRS	0,86	0,00	0,86
			4011 GTC	0	0	0
Renewable secondary fuels		MJ, net calorific	4922 GRS	0	0	0
		value	4011 GTC	0	0	0
Non-renewable secondary fuels		MJ, net calorific	4922 GRS	0	0	0
		value	4011 GTC	0	0	0
Net use of fresh water		m³	4922 GRS	0,008	0,026	0,034
			4011 GTC	0,030	0,082	0,113

#### **WASTE PRODUCTION AND OUTPUT FLOWS**

#### **WASTE PRODUCTION**

PARAMETER	UNIT	JACKET	UPSTREAM	CORE	TOTAL
Hazardous waste disposed	1	4922 GRS	0	0	0
Hazardous waste disposed	kg	4011 GTC	0	0	0
Non hazardous wasta disposad	kg	4922 GRS	0,09	0,14	0,23
lon-hazardous waste disposed		4011 GTC	0,32	0,33	0,64
Dadioactivo waste disposed	kg	4922 GRS	0	0	0
Radioactive waste disposed		4011 GTC	0	0	0

The result tables shall only contain values or the letters "INA" (Indicator Not Assessed). It is not possible to specify INA for mandatory indicators. INA shall only be used for voluntary parameters that are not quantified because no data is available.

#### **ADDITIONAL INFORMATION**

Our garments are OEKO-TEX® certified at garment level and we have a well-established programme to monitor chemical safety compliance.

The water savings (Water Scarcity Footprint) in Green Shell jacket 4922 GRS compared to Airtech® zip-in jacket 4011 GTC stems mainly from using dope dyeing instead of piece dyeing in the core processes, which is illustrated in Figure 1.

The Global Warming Potential (GWP) of Green Shell jacket 4922 GRS compared to

Airtech® zip-in jacket 4011 GTC are shown in Figure 2. The lower climate impact stems from using recycled polyester and using less fossil fuels in the upstream as well as core processes.

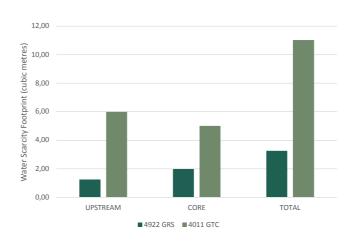


Figure 1. The Water Scarcity Footprint of Green Shell jacket 4922 GRS and Airtech® zip-in jacket 4011 GTC. Figures for one jacket.

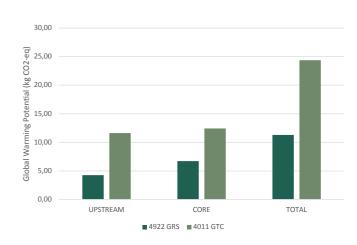
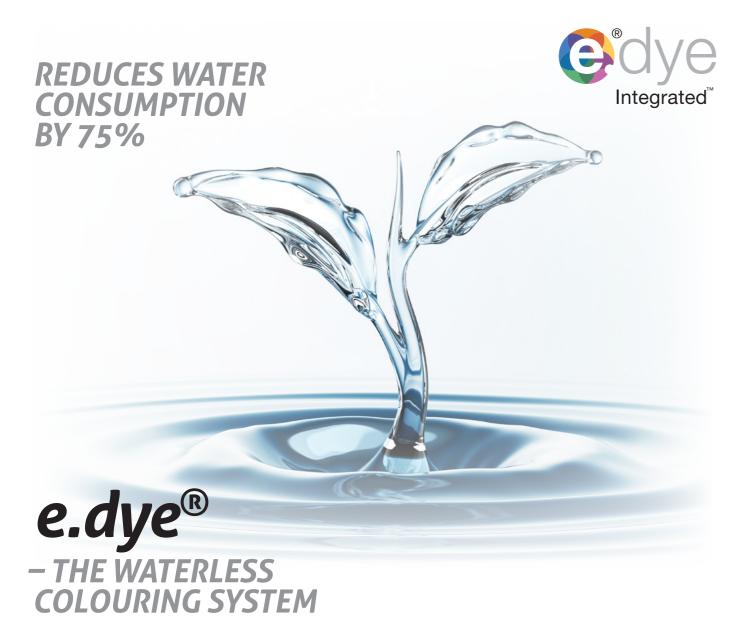


Figure 2. The Global Warming Potential of Green Shell jacket 4922 GRS and Airtech® zip-in jacket 4011 GTC. Figures for one jacket.

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e.dye is a solution dyed polyester color system with over 2,500 colors and a sophisticated color-matching process for textiles. Solution dyeing means putting color inside the masterbatch chips, melt spun and extruded into yarn in color, instead of extruding raw white yarn that is later dyed in traditional water dye process.

With over 20 years of experience, e.dye Ltd has the R&D and knowhow to offer customers a wide range of support and value added services that provide a competitive edge.

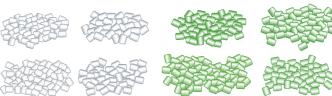
By controlling the entire supply chain, they make their own recipe by producing their masterbatch 100% in-house. This is then sent throughout the supply chain with clear instructions for the best end result on fabric ready for garment production. They ensure that quality meets the highest standards. e.dye® Waterless Color System™ offers an environmentally sustainable process for dyeing fabrics. Using the solution dyed polyester process, e.dye® requires no water to dye synthetics. By adding the color before the polymers are extruded, the color is inside the yarn,resulting in superior color performance. e.dye is a solution dyed polyester color

system with over 2,500 colors and a sophisticated color-matching process for garment textiles.

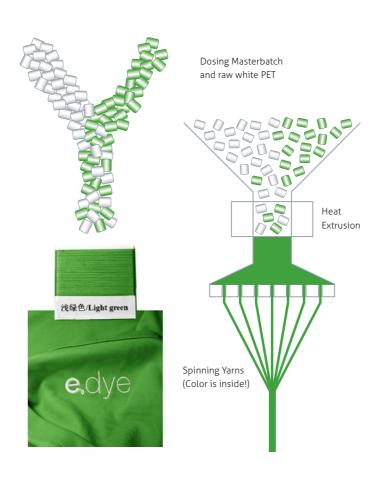
e.dye is a paradigm shift in textile dyeing, because e.dye actually puts the color inside the yarn.

# THIS IS THE e.dye TECHNIQUE

#### WHAT IS e.dye?



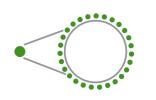
Raw stock rPET. Up to 95% recycled. GRS Certified. Masterbatch Colors - in stock Made in-house by e.dye, according to a recipe tied to 2,500 colors in the e.dye Color Bank.



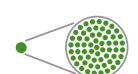
This process eliminates water consumption and reduces chemical use, energy consumtion and CO<sub>2</sub> emissions.

#### WHY IS e.dye BETTER?

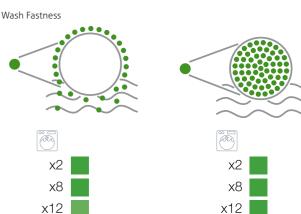
Traditional Piece Dye Color is outside - of the surface of the yarn filament. e.dye® Waterless Color System™ Color is inside - evenly dispersed throughout the entire yarn filament.

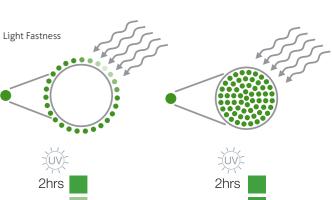


x60 x130



x130





2hrs 2hrs 10hrs 10hrs 30hrs 100hrs 100hrs 500hrs 500hrs

## RECYCLED POLYESTER

Recycled polyester is made from an already produced resource instead of exploiting fossil resources and has the same quality as virgin polyester fibre.

Recycled polyester can be produced in several ways; either mechanically from PET bottles or chemically from different polyester waste materials, for example production waste from the textile industry.

When using recycled materials it is important to secure traceability throughout the supply chain. Fristads work with transparent suppliers who can provide materials with relevant certification, for example Global Recycled Standard (GRS) certification, and be transparent regarding their material sources.

#### **POLYESTER IN GENERAL**

Polyester is a common used fibre in the textile industry. Due to its durability and strength in combination with good abrasion resistance it is a great fibre for workwear.

Polyester is a synthetic fibre generally based on fossil resources, but it can also be made from biobased resources. Polyester is possible to recycle through chemical or mechanicals methods.

Polyester can be laundered in high temperatures with maintained performance, which is of great importance for workwear.

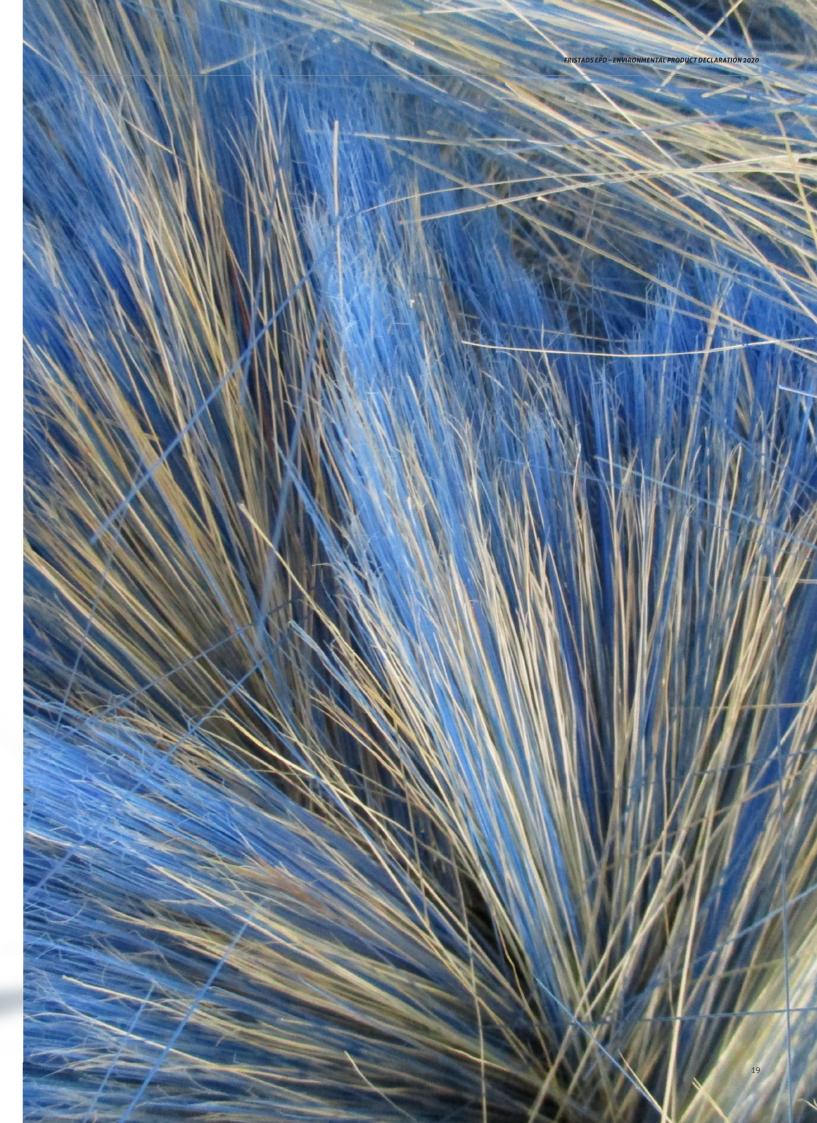


- Very durable
- Strong material
- Good abrasion
- High launderability
- Recyclable



- Based on fossil resources
- Release of microplastics





All textile waste is gathered and reused as covers and stuffed animals.



## ZERO WASTE

An important part of creating a sustainable production is making sure that the amount of waste is minimized. At Fristads we initiated a zerowaste project in connection to the Fristads Green collection being launched in 2019.

When we launched the Fristads Green collection in the end of 2019 we also introduced a waste product called "Comfort pads". The comfort pads are made of waste from the production of the Green products and are turned into pads that can be used in the Green garments for craftsmen.

The zero-waste project continue with new product developments and the ambition is to turn the waste fabric into new types of products that can be sold in the local areas around the manufacturer.





Fristads is the first company in the world to measure the environmental impact of clothes. Fristads Green is a concept of workwear where the entire manufacturing chain is characterized by environmental awareness and innovation to minimize the footprint on the environment.



Fristads Green products have a certified Environmental Product Declaration (EPD) giving information about the environmental performance, contents and recycling.

The garments are specially designed, featuring advanced folding that reduces sewing time and avoids unnecessary waste. The garments have a clean design involving minimal details and smart solutions, which saves energy in production and facilitates recycling of the material.

For our Green collection we employ a "zero waste" approach – which means that we reuse all waste material from production.

In order to avoid the use of plastic bags, garments are folded using a special folding technique. This also means they take up less space, allowing us to make optimum use of transport capacity.

All transport is by sea and road, which has significantly less environmental impact than air transport.

#### PROGRAMME-RELATED INFORMATION AND VERIFICATION

The EPD owner has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programmes may not be comparable

Programme:	The International EPD® System  EPD International AB  Box 210 60  SE-100 31 Stockholm  Sweden  www.environdec.com info@environdec.com
EPD registration number:	S-P-01762
Published:	2020-03-04
Valid until:	2025-03-04
Product Category Rules:	PCR 2019:04 Jackets, coats and other similar outdoor garments. Version 1.01
Product group classification:	UN CPC 282
Reference year for data:	2018-19
Geographical scope:	Global

Product category rules (PCR): Jackets, coats and other similar outdoor garments, PCR 2019:04, Version 1.01, UN CPC 282.				
PCR review was conducted by: The Technical Committee of the International EPD® System. A full list of members available on www.environdec.com. The review panel may be contacted via info@environdec.com. Chair of the PCR review: Hüdai Kara, Metsims Sustainability Consulting.				
Independent third-party verification of the declaration and data, according to ISO 14025:2006:				
☐ EPD process certification ☑ EPD verification				
Third party verifier:				
Marcus Wendin Miljögiraff AB				
Approved by: The International EPD® System				
Procedure for follow-up of data during EPD validity involves third party verifier:				
☐ Yes   ☑ No				

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