EPD®

FRISTADS®

# EPD – ENVIRONMENTAL PRODUCT DECLARATION

***IN ACCORDANCE WITH ISO 14025 FOR:***
***GREEN SWEATSHIRT 7989 GOS AND COTTON SWEATSHIRT 7016 SMC***

## 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:***
Portugal

| | |
|---|---|
| ***PROGRAMME:*** | The International EPD® System<br>www.environdec.com |
| ***PROGRAMME OPERATOR:*** | EPD International AB |
| ***EPD REGISTRATION NUMBER:*** | S-P-01759 |
| ***PUBLICATION DATE:*** | 2020-03-04 |
| ***VALIDITY DATE:*** | 2025-03-04 |
| ***GEOGRAPHICAL SCOPE:*** | Global |

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***

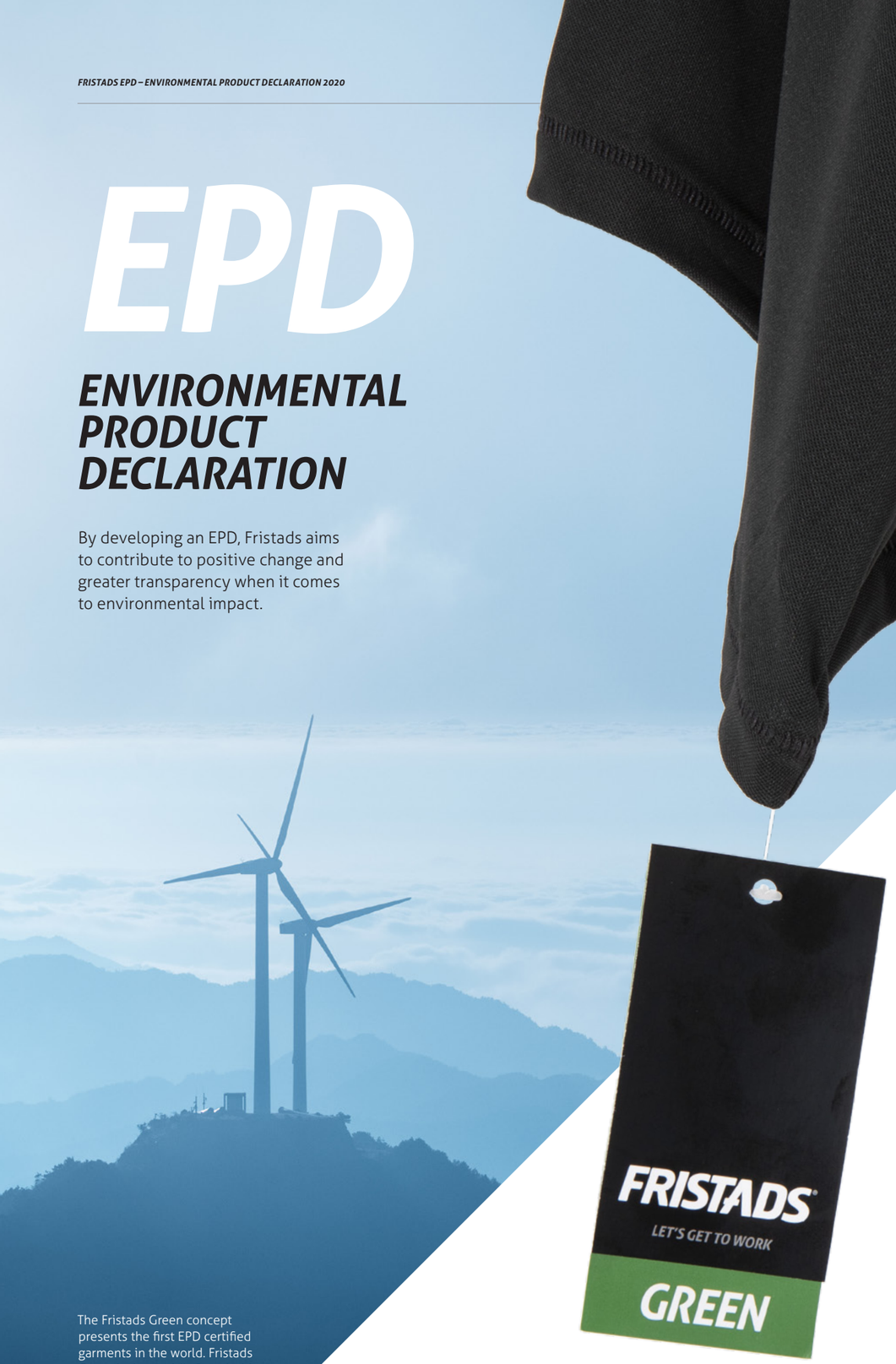
***ENVIRONMENT***

***CHEMICAL REGULATIONS***

# EPD

## ENVIRONMENTAL PRODUCT DECLARATION

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




The Fristads Green concept presents the first EPD certified garments in the world. Fristads Green is the world's first clothing line with an Environmental Product Declaration (EPD).





# 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.

EPD®



# THE WORLD'S FIRST SWEATSHIRT WITH AN EPD

Clean design involving minimal details and smart solutions; saves energy in production and facilitates recycling of the material

100% organic cotton

All surplus material from production is utilised on site and turned into new products like socks and blankets

EPD®

OEKO-TEX® STANDARD 100

**GREEN SWEATSHIRT 7989 GOS**
**Article no131158**

Part of Fristads Green collection / Organic cotton / Round neck / Rib-knitted cuffs and bottom / Tone-in-tone stitches / With EPD (Environmental Product Declaration) / OEKO-TEX® certified.

***MATERIAL*** 100% organic cotton. ***WEIGHT*** 335 g/m². ***COLOUR*** 540 Dark Navy, 940 Black, 941 Dark Grey. ***SIZE*** XS-4XL.





# GREEN SWEATSHIRT 7989 GOS AND COTTON SWEATSHIRT 7016 SMC

The Green Sweatshirt 7989 GOS and Cotton Sweatshirt 7016 SMC are constructed from a main fabric made of organic respective conventional cotton.

| GARMENT NAME | STYLE NO | DESCRIPTION |
|---|---|---|
| Green Sweatshirt 7989 GOS | 131158 | Sweatshirt: Green collection, organic cotton |
| Cotton Sweatshirt 7016 SMC | 121631 | Sweatshirt: Comparison product, conventional cotton |

***GREEN SWEATSHIRT 7989 GOS***
Art no 131158

***COTTON SWEATSHIRT 7016 SMC***
Art no 121631

# 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[1] .
The goal of the present LCA study has been to calculate environmental impact values for Fristads' Green Sweatshirt 7989 GOS and Cotton Sweatshirt 7016 SMC 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 sweatshirt 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[2] 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 down-stream 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 QUALITY
The data quality has been considerably increased by the experience from making a similar study in the past[5].

### ADDITIONAL INFORMATION ABOUT THE LCA STUDY

### TIME REPRESENTATIVENESS:
2018-2019

### DATABASE(S) AND LCA SOFTWARE USED:
SimaPro version 9.0.0.48[6]
ecoinvent version 3.5[7]

### 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

[1] EPD International, "General Programme Instructions for the International EPD® System Version 3.0" (Stockholm, Sweden, 2017), www.environdec.com.
[2] 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).
[3] EPD International, 'PCR 2019:05. Sweaters, Jerseys, Pullovers, Cardigans, Fleeces and Similar Garments: UN CPC 282. Product Category Rules According to ISO 14025. Version 1.01' (2019).
[4] Ecoinvent, "Ecoinvent" (Zurich, Switzerland: Ecoinvent, 2019), https://www.ecoinvent.org/database/database.html.
[5] EPD International, 'EPD FLEECE JACKET 4921 GRF AND HALF ZIP SWEATSHIRT 7048 SHV. EPD Registration Number S-P-01535.' (2019).
[6] PRé Consultants, "SimaPro 9.0" (PRé Consultants, 2019), http://www.pre-sustainability.com/simapro.
[7] Ecoinvent, 'Ecoinvent' <https://www.ecoinvent.org/database/database.html>.

FRISTADS EPD – ENVIRONMENTAL PRODUCT DECLARATION 2020

# 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.

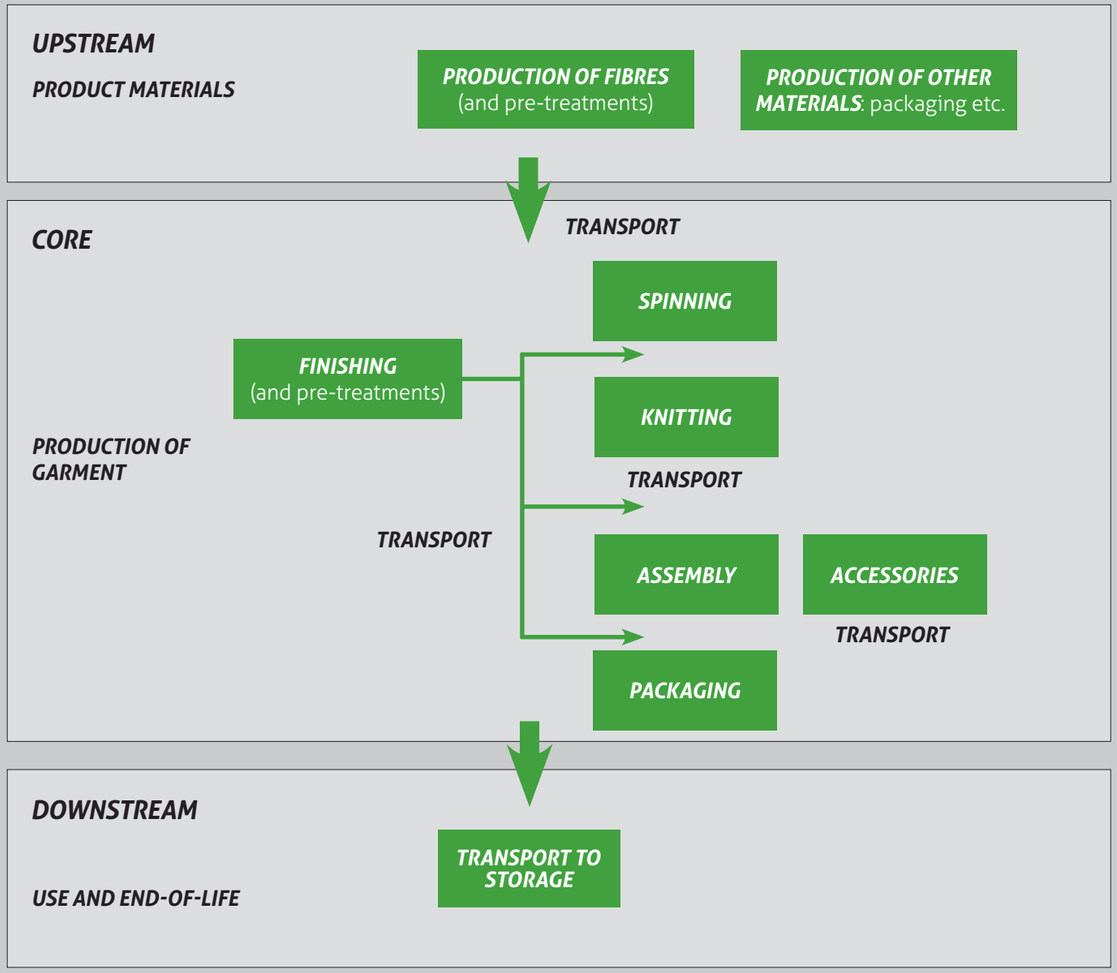



***Figure 1.*** The system boundaries include upstream, core and downstream processes.

# PRODUCT CHARACTERISTICS

The product characteristics are presented in the table below.

## PRODUCT CHARACTERISTICS

| CHARACTERISTIC | TEST METHOD | RESULTS GOS | RESULTS SMC |
|---|---|---|---|
| **COMPOSITION** | Regulation EU No 1007/2011 | 100% Cotton | 100% Cotton |
| **WEAVE** | ISO 8388 | French Terry: Italian knit | French Terry: American knit |
| **MASS PER UNIT AREA** | EN 12127 | 335 g/m² | 320 g/m² |
| **WIDTH** | EN 1773 | 170-205 cm | 200 cm |
| **ABRASION STRENGTH** | ISO 13938-2 | Exceeds 500 kPa | Exceeds 500 kPa |
| **PILLING TEST (MARTINDALE) AFTER 5000 RUBS** | EN ISO 12945-2 | 4 | 2-3 |
| **STRETCH PROPERTIES** | EN 14704-1 | Extension at 15 N<br>Lengthwise: 28,1%<br>Widthwise: 35,5%<br>Residual extension after 1 min relax:<br>Lengthwise: 5,7%<br>Widthwise: 8%<br>Residual extension after 30 min relax:<br>Lengthwise: 2,7%<br>Widthwise: 5% | Extension at 15 N<br>Lengthwise: 39,1%<br>Widthwise: 44,2%<br>Residual extension after 1 min relax:<br>Lengthwise: 10,3%<br>Widthwise: 12%<br>Residual extension after 30 min relax:<br>Lengthwise: 6,3%<br>Widthwise: 8% |
| **DIMENSIONAL CHANGE TO WASHING** | EN ISO 6330<br>EN ISO 3759<br>EN ISO 5077 | Lengthwise: +/-5%<br>Widthwise: +/-5% | Lengthwise: +/-5%<br>Widthwise: +/-5% |
| **PH OF WATER EXTRACT** | EN ISO 3071 | 5,2 | 5,9 |
| **COLOUR FASTNESS TO ARTIFICIAL LIGHT: XENON ARC FADING LAMP TEST** | EN ISO 105 B02 | 4 | 4 |
| **COLOUR FASTNESS TO WASHING** | EN ISO 105 C06 | Colour change: 4<br>Colour staining:<br>Acetete: 4<br>Cotton: 3-4<br>Nylon: 4<br>Polyester: 4<br>Acrylic: 4<br>Viscose: 4 | Colour change: 4<br>Colour staining:<br>Acetate: 4<br>Cotton: 4<br>Nylon: 4<br>Polyester: 4<br>Acrylic: 4<br>Viscose: 4 |
| **ACID AND ALKALINE PERSPIRATION** | EN ISO 105 E04 | Acid:<br>Colour change: 4<br>Colour staining:<br>Acetate: 4<br>Cotton: 4<br>Nylon: 4<br>Polyester: 4<br>Acrylic: 4<br>Wool: 4<br><br>Alkaline:<br>Colour change: 4<br>Colour staining:<br>Acetate: 4<br>Cotton: 4<br>Nylon: 4<br>Polyester: 4<br>Acrylic: 4<br>Wool: 4 | Acid:<br>Colour change: 4<br>Colour staining:<br>Acetate: 4<br>Cotton: 4<br>Nylon: 4<br>Polyester: 4<br>Acrylic: 4<br>Viscose: 4<br><br>Alkaline:<br>Colour change: 4<br>Colour staining:<br>Acetate: 4<br>Cotton: 4<br>Nylon: 4<br>Polyester: 4<br>Acrylic: 4<br>Viscose: 4 |
| **DRY AND WET RUBBING** | EN ISO 105 X12 | Dry: 4<br>Wet: 2-3 | Dry: 4<br>Wet: 2-3 |





# CONTENT DECLARATION

## GREEN SWEATSHIRT 7989 GOS SIZE L

| MATERIALS | UNIT | % | ENVIRONMENTAL / HAZARDOUS PROPERTIES |
|---|---|---|---|
| Fabric GOS | | 95% | 100% organic cotton |
| Fabric Rib GOS | | 1% | 95% organic cotton, 5% elastane |
| Thread polyester | | ~0% | 100% polyester |
| Care and size labels | | 2% | 100% polyester |
| Paper trims | | 2% | 100% paper |

## COTTON SWEATSHIRT 7016 SMC SIZE L

| MATERIALS | UNIT | % | ENVIRONMENTAL / HAZARDOUS PROPERTIES |
|---|---|---|---|
| Fabric SMC | | 95% | 100% cotton |
| Fabric Rib SMC | | 2% | 95% cotton, 5% elastane |
| Thread polyester | | ~0% | 100% cotton |
| Care and size labels | | 2% | 100% polyester |
| Paper trims | | 1% | 100% paper |

## PACKAGING

Distribution packaging: Cardboard box

# 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 | SWEATSHIRT | UPSTREAM | CORE | TOTAL |
|---|---|---|---|---|---|---|
| Global warming potential (GWP) | Fossil | kg $CO_2$ eq. | 7989 GOS | 1.20 | 1.25 | 2.52 |
| | | | 7016 SMC | 2.85 | 1.25 | 4.17 |
| | Biogenic | kg $CO_2$ eq. | 7989 GOS | 0.13 | 0.49 | 0.62 |
| | | | 7016 SMC | 0.13 | 0.50 | 0.64 |
| | Land use and land transformation | kg $CO_2$ eq. | 7989 GOS | 0.00 | 0.02 | 0.02 |
| | | | 7016 SMC | 0.01 | 0.01 | 0.03 |
| | ***TOTAL*** | kg $CO_2$ eq. | 7989 GOS | 1.19 | 1.40 | 2.66 |
| | | | 7016 SMC | 2.85 | 1.39 | 4.31 |
| Acidification potential (AP) | | kg $SO_2$ eq. | 7989 GOS | 0.006 | 0.009 | 0.016 |
| | | | 7016 SMC | 0.024 | 0.009 | 0.034 |
| Eutrophication potential (EP) | | kg $PO_4^{3-}$ eq. | 7989 GOS | 0.002 | 0.004 | 0.006 |
| | | | 7016 SMC | 0.011 | 0.004 | 0.015 |
| Formation potential of tropospheric ozone (POCP) | | kg NMVOC | 7989 GOS | 0.005 | 0.008 | 0.013 |
| | | | 7016 SMC | 0.012 | 0.007 | 0.020 |
| Water scarcity potential | | $m^3$ eq. | 7989 GOS | 19.4 | 1.1 | 20.5 |
| | | | 7016 SMC | 59.9 | 1.1 | 61.0 |

## USE OF RESOURCES

| PARAMETER | | UNIT | SWEATSHIRT | UPSTREAM | CORE | TOTAL |
|---|---|---|---|---|---|---|
| Primary energy resources – Renewable | Use as energy carrier | MJ, net calorific value | 7989 GOS | 2.7 | 7.5 | 10.2 |
| | | | 7016 SMC | 35.9 | 7.3 | 43.2 |
| | Used as raw materials | MJ, net calorific value | 7989 GOS | 0 | 0 | 0 |
| | | | 7016 SMC | 0 | 0 | 0 |
| | ***TOTAL*** | MJ, net calorific value | 7989 GOS | 2.7 | 7.5 | 10.2 |
| | | | 7016 SMC | 35.9 | 7.3 | 43.2 |
| Primary energy resources – Non-renewable | Use as energy carrier | MJ, net calorific value | 7989 GOS | 11.0 | 22.2 | 34.4 |
| | | | 7016 SMC | 36.6 | 21.7 | 59.4 |
| | Used as raw materials | MJ, net calorific value | 7989 GOS | 0.6 | 0 | 0.6 |
| | | | 7016 SMC | 0.5 | 0 | 0.5 |
| | ***TOTAL*** | MJ, net calorific value | 7989 GOS | 11.5 | 22.2 | 34.9 |
| | | | 7016 SMC | 37.1 | 21.7 | 59.9 |
| Secondary material | | kg | 7989 GOS | 0 | 0 | 0 |
| | | | 7016 SMC | 0 | 0 | 0 |
| Renewable secondary fuels | | MJ, net calorific value | 7989 GOS | 0 | 0 | 0 |
| | | | 7016 SMC | 0 | 0 | 0 |
| Non-renewable secondary fuels | | MJ, net calorific value | 7989 GOS | 0 | 0 | 0 |
| | | | 7016 SMC | 0 | 0 | 0 |
| Net use of fresh water | | $m^3$ | 7989 GOS | 0.75 | 0.01 | 0.76 |
| | | | 7016 SMC | 11.34 | 0.01 | 11.35 |





# WASTE PRODUCTION AND OUTPUT FLOWS

## WASTE PRODUCTION

| PARAMETER | UNIT | SWEATSHIRT | UPSTREAM | CORE | TOTAL |
|---|---|---|---|---|---|
| Hazardous waste disposed | kg | 7989 GOS | 0 | 0 | 0 |
| | | 7016 SMC | 0 | 0 | 0 |
| Non-hazardous waste disposed | kg | 7989 GOS | 0.01 | 0.16 | 0.17 |
| | | 7016 SMC | 0.01 | 0.15 | 0.16 |
| Radioactive waste disposed | kg | 7989 GOS | 0 | 0 | 0 |
| | | 7016 SMC | 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 Sweatshirt 7989 GOS compared to Cotton Sweatshirt 7016 SMC stems mainly from using organic cotton instead of conventional cotton in the upstream processes, which is illustrated in Figure 1.

The Global Warming Potential (GWP) of Green Sweatshirt 7989 GOS compared to Cotton Sweatshirt 7016 SMC are shown in Figure 2. The lower climate impact stems from using organic cotton in the upstream part as well as using less fossil fuels in the core processes.

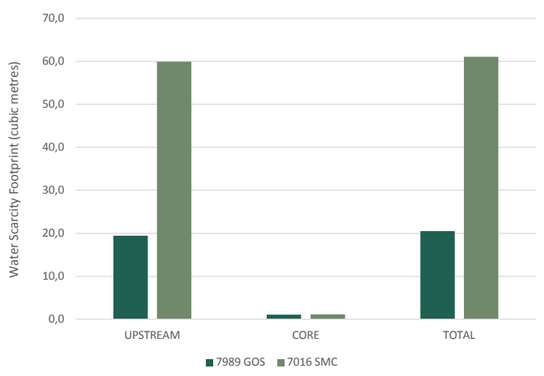



***Figure 1.*** The Water Scarcity Footprint of Green Sweatshirt 7989 GOS and Cotton Sweatshirt 7016 SMC. Figures for one sweatshirt.

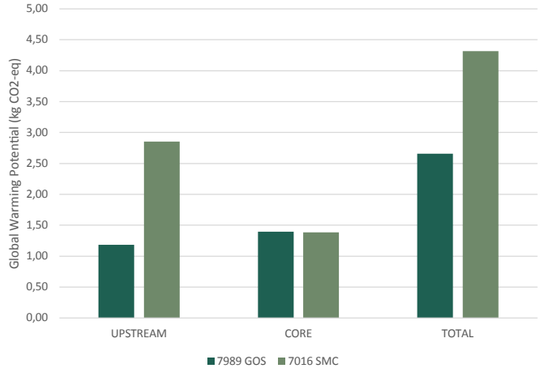



***Figure 2.*** The Global Warming Potential of Green Sweatshirt 7989 GOS and Cotton Sweatshirt 7016 SMC. Figures for one sweatshirt.

# GENERAL INFORMATION ABOUT COTTON

Cotton is the most used natural fibre in the textile industry. The cotton fibre contributes to high comfort in garments and offers good moisture absorption.

The cotton fibre is often used in blend with polyester to achieve fabric qualities such as strength, comfort and launderability. Cotton can be laundered in high temperatures with maintained performance, which is of great importance for workwear.

**+**

- Natural fibre
- Offers high comfort
- Technical performance
- Good moisture absorption
- High launderability

**–**

- Water consumption during the growing of cottons
- Consumption of pesticides during cultivation of cotton, resulting in chemical emissions to water and air
- Difficult to recycle cotton from textiles with maintained quality

# ORGANIC COTTON

Organic cotton is cotton that is produced and certified to organic agricultural standards. The production sustains the health of soils, surrounding eco systems and usage of natural processes as well as eliminating the usage of toxic fertilizers, pesticides and GMO's (Genetically Modified Organisms).

POTENTIAL SAVINGS

**GLOBAL WARMING**

**46%**

Reduced agricultural inputs; i.e. mineral fertilizer, pesticides, tractor operations & irrigations.

**ACIDIFICATION OF LAND & WATER**

**70%**

Reduced field emissions from fertilizer. Reduced energy use.

**WATER CONSUMPTION**

**91%**

Less irrigation.





All tetile waste is made into yarn and used to produce socks.

# 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 zero-waste 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 GREEN COLLECTION

## GARMENTS WITH CARE FOR THE FUTURE

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<br><br>EPD International AB<br>Box 210 60<br>SE-100 31 Stockholm<br>Sweden<br><br>www.environdec.com<br>info@environdec.com |
| EPD registration number: | S-P-01759 |
| Published: | 2020-03-04 |
| Valid until: | 2025-03-04 |
| | |
| Product Category Rules: | PCR 2019:05 Sweaters, Jerseys, Pullovers, Cardigans, Fleeces and Similar Garments. Version 1.01 |
| Product group classification: | UN CPC 282 |
| Reference year for data: | 2018-19 |
| Geographical scope: | Global |

| |
|---|
| Product category rules (PCR):<br>Sweaters, Jerseys, Pullovers, Cardigans, Fleeces and Similar Garments, PCR 2019:05, Version 1.01, UN CPC 282. |
| PCR review was conducted by:<br>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.<br>Chair of the PCR review:<br>Hüdai Kara, Metsims Sustainability Consulting. |
| Independent third-party verification of the declaration and data, according to ISO 14025:2006:<br><br>☐ EPD process certification ☑ EPD verification |
| Third party verifier:<br><br>Marcus Wendin<br>Miljögiraff AB<br><br>Approved by: The International EPD® System |
| Procedure for follow-up of data during EPD validity involves third party verifier:<br><br>☐ Yes ☑ No |

# REFERENCES


Anonymous. (2020b). Facility O for confectioning.

Anonymous. (2020c). Facility P for knitting, wet treatment and finishing.

Anonymous. (2020d). Facility Q for knitting, wet treatment and finishing.

Ecoinvent, 'Ecoinvent' <https://www.ecoinvent.org/database/database.html>

EPD International, 'EPD FLEECE JACKET 4921 GRF AND HALF ZIP SWEATSHIRT 7048 SHV. EPD Registration Number S-P-01535.' (2019)

EPD International, 'General Programme Instructions of the International EPD® System Version 3.0' (2017) <www.environdec.com.>

EPD International, 'PCR 2019:05. Sweaters, Jerseys, Pullovers, Cardigans, Fleeces and Similar Garments: UN CPC 282. Product Category Rules According to ISO 14025. Version 1.01' (2019).

PRé Consultants, 'SimaPro 9.0' <http://www.pre-sustainability.com/simapro>


## CONTACT INFORMATION:

| PARAMETER | UNIT |
|---|---|
| EPD owner: | Fristads AB<br>Prognosgatan 24 , 501 11 Borås<br>Sweden<br>***CONTACT PERSON:***<br>Lene Jul<br>lene.jul@fristads.com<br>www.fristads.com |
| LCA author: | RISE AB,<br>PO Box 104, SE 431 22 Mölndal,<br>Sweden<br>***CONTACT PERSON:***<br>Sandra Roos<br>www.swerea.se |
| Programme operator: | EPD International AB<br>info@environdec.com |