



Environmental Product Declaration



In accordance with ISO 14025 and Product Category Rules for Absorbent Hygiene Products

TENA Bed



Date of publication: 2015-05-04 Valid until: 2025-10-11

PCR reference: CPC division 32193

Absorbent Hygiene Products

PCR 2011:14 V. 3.01

Registration number: S-P-00638 **Revision date:** 2024-03-13

Version:

Programme: International EPD® System **Programme operator**: EPD International AB





Essity is a leading global hygiene and health company

Essity is a global, leading hygiene and health company. We are dedicated to improving well-being through our products and services.

Sales are conducted in approximately 150 countries under the leading global brands TENA and Tork, and other strong brands, such as Actimove, JOBST, Knix, Leukoplast, Libero, Libresse, Lotus, Modibodi, Nosotras, Saba, Tempo, TOM Organic, Vinda and Zewa.

Essity has about 48,000 employees. Net sales in 2022 amounted to approximately SEK 156bn (EUR 15bn).

The company's headquarters is located in Stockholm, Sweden, and Essity is listed on Nasdaq Stockholm. Essity breaks barriers to well-being and contributes to a healthy, sustainable and circular society. More information at www.essity.com.

TENA is a part of Essity

Through our TENA brand, we offer a broad range of incontinence products and services. The clear purpose of this offering is to care for people, improve their quality of life, and help them live with dignity and confidence.

For our institutional customers, such as nursing homes, it also means reducing costs while increasing efficiency and quality of care. This is done through a combination of high-quality products and qualified advisory services that simplify handling procedures for care providers.

Since incontinence is often surrounded by a social taboo, enhancing quality of life also means promoting an open dialogue to break down the stigma. So, in addition to providing products that improve health and hygiene, we're working hard to raise awareness, provide training and global forums, and drive high-level dialogues around the world.

At TENA we're continually innovating new products that are increasingly discrete, comfortable, effective, and easy to use, while also reducing our carbon footprint. To make a better mark – For a more positive impact on society and the planet.





	TENA assortment
TENA Female Liners & Pads	A drier, safer, and more comfortable product than ordinary menstrual towels. The liners and pads give triple protection against leaks, odour, and moisture. The products are body shaped for comfort, protection, and discretion.
TENA Men	TENA Men are discreet and safe protection for men who experience urine leakage. Specially developed for men who want discretion and to continue to live an active life.
TENA Pants & Underwear	Close body fit for security and confidence. High performance products that Absorbent disposable pant for users experiencing incontinence. High performance products, that are as easy to put on/take off as underwear. Stretchy, soft and textile-like materials offer users a body-close fit for healthy skin, high leakage security, confidence, and comfort during use. The products are available in a range of sizes and absorbency levels and as unisex or gender specific products and are suitable for all types of incontinence. Dermatologically tested and/or Dermatologically Approved by Skin Health Alliance.
TENA Flex	A belted product with elastic belt for easy & ergonomic changes for the carer and high security for the user. TENA Flex provides ease of use and best fit; adjusts to different body shapes, securing comfortable fit, skin health and superior leakage security. The products are available in a range of sizes and absorbency levels and are suitable for all types of incontinence. Dermatologically tested and/or Dermatologically Approved by Skin Health Alliance.
TENA Comfort TENA Rectangular	All-in-one incontinence products designed to provide protection for healthy skin and high leakage security. The products are available in a broad range of sizes and absorbency levels ensuring a comfortable adjustable fit and are suitable for all types of incontinence. Dermatologically tested and/or Dermatologically Approved by Skin Health Alliance.
TENA Slip	All-in-one incontinence products designed to provide protection for healthy skin and high leakage security. The products are available in a range of sizes and absorbency levels and are suitable for all types of incontinence. Dermatologically tested and/or Dermatologically Approved by Skin Health Alliance.
TENA Fix	A seamless, washable and reusable fixation pant supporting leakage security. Ensures that TENA Comfort and TENA Rectangular pads stay securely in place. Soft and elastic material provides comfort. Can be washed several times without losing shape.
TENA Bed	Provides protection for beds and chairs against accidental urine loss and during hygiene procedures. Dermatologically tested so it is gentle to the skin. Available in a range of sizes and absorbency levels.
	Baby diaper assortment
Libero assortment	The Libero assortment fulfils the demands for premium-brand baby diaper and the diapers have an absorption capacity/function that cover different steps of the baby's diaper needs. The diapers consist of an absorbent core, anti-leakage barrier, fastening system, and a back sheet. The assortment is uni-sex.
DryKids	DryKids assortment of breathable diapers for children quickly absorb urine and help to keep the child's skin dry and healthy.





	s environmental declaration ers the following products	Article number	Dimension (mm)	Weight ± 5% (g)
1	TENA Bed Original 60 x 60	770048	600 x 600	37
2	TENA Bed Original 60 x 90	770049	600 x 900	56
3	TENA Bed Normal 60 x 60	770044 770045	600 x 600	40
4	TENA Bed Normal 60 x 90	770046 770047	600 x 900	61
5	TENA Bed Plus / Plus Secure Zone 60 x 40	770114* 770118 770132	600 x 400	32
6	TENA Bed Plus / Plus Secure Zone 60 x 60	770100 770109* 770119	600 x 600	50
7	TENA Bed Plus / Plus Secure Zone 60 x 75	770121 770131*	600 x 750	64
8	TENA Bed Plus / Plus Secure Zone 60 x 90	770104 770111* 770120	600 x 900	77
9	TENA Bed Super 60 x 75	772534	600 x 750	75
10	TENA Bed Super / Super Secure Zone 60x90	770210* 772532	600 x 900	91
11	TENA Bed 80 x 180 Secure Zone	771102 771103* 771106* 771107*	1800 x 800	118

^{*} Article approved according to the Nordic Ecolabel License 3023 0032, or 3023 0069









The way we work

We assess the environmental impact of our products using a full life cycle approach, beginning with product design, through manufacturing, transport, use, and disposal.

RESPONSIBLE SOURCING involves seeking high-quality raw materials that are safe from both a social and environmental perspective. The company's suppliers adhere to strict demands in Essity's Global Supplier Standard

RESOURCE EFFICIENT

PRODUCTION is efficient use of resources, and the continuous reduction of energy and waste. Essity's objective is to develop products and services for a sustainable and circular society. The TENA production units are working with the management systems ISO 13485, ISO 14001 and ISO 18001.

sustainable solutions are safe and with the ambition to be environmentally sound innovations for hygiene products and services, based on customer and consumer insights, enabling us to meet their needs in daily life.

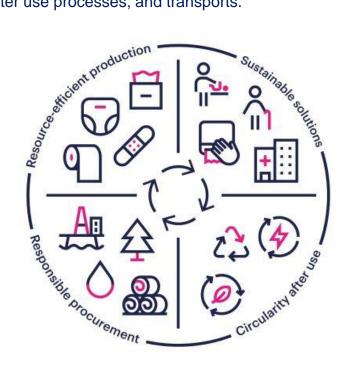






Life cycle management of Essity products

The information presented in an environmental product declaration is obtained from a Life Cycle Assessment (LCA), which is a study of the potential environmental impact of a product throughout its life cycle, including production of raw materials and products, use of the product, after use processes, and transports.







Environmental achievements

The following carbon footprint reductions for different TENA product groups have been achieved during the years 2008 to 2022 by working in a structured way to continually improve performance and efficiency.

Product	Carbon footprint reduction (g CO ₂ -eq/product)
TENA Flex	- 22 %
TENA Pads & Liners	- 43 %
TENA Men	- 26 %
TENA Pants & Underwear	- 41 %
TENA Slip	- 32 %
TENA Comfort	- 21 %
TENA Bed	- 24 %

The carbon footprint reductions in Europe between 2008-2022 for TENA products are based on Life Cycle Assessments (LCA). The LCA is conducted by Essity, and third party verified in 2023.

Production of TENA products







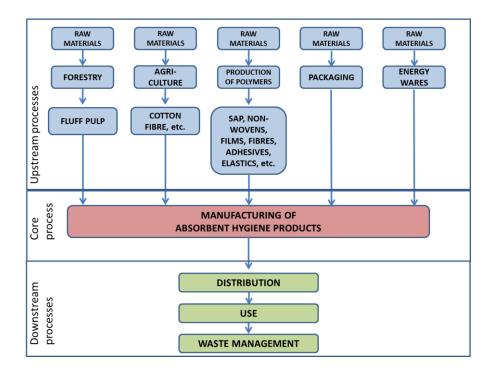


TENA products are made using high-quality materials, with strict requirements on product safety. The materials used are cellulose fibers from certified forestry and purpose-specific plastic materials. Production takes place at high-technology facilities with stringent hygienic and product safety standards that guarantee product quality and ensure users' safety and well-being.





Life cycle of an absorbent hygiene product



UPSTREAM PROCESSES

Extraction of natural resources, biomass production Production of raw materials, energywares, packaging materials Transportation of input raw materials

CORE PROCESS

Manufacturing of TENA products

DOWNSTREAM PROCESSES

Transportation to customer Product use Waste management (including packaging)

LIFE CYCLE DESCRIPTION

The life cycle of a TENA product starts with the **UPSTREAM PROCESSES**: These include extraction of natural resources for the different raw materials as well as fuel production for both heat and power generation. The production of the raw materials, such as fluff pulp and superabsorbent polymers for the absorbent core, nonwovens for inner lining, and plastic films for the outer shell are part of the upstream processes. Transports of raw materials to the manufacturing

The **CORE PROCESS**, the actual manufacturing of the different TENA products, is a highly efficient converting process where the different materials are put together with high precision, which results in well performing products with an efficient use of resources thanks to innovative design and scientific solutions. The core process also includes handling of production waste.

In the **DOWNSTREAM PROCESSES**, the products are transported to the customer either in the homecare segment or for institutional users. The use phase as such has no environmental impact and gives therefore no contribution to the calculations. The final step is the waste management, also including handling of packaging waste.

The life cycle calculations for TENA products in this EPD are "cradle-to-grave", i.e., all process of upstream, core and downstream are included as in the figure above.





Parameters in the declaration

FUNCTIONAL UNIT

The functional unit is according to PCR 2011:14, one product. In addition, the result is reported for a standard number of products used for one day, which is defined as four products.

CALCULATION OF GLOBAL WARMING POTENTIAL Both emissions to and removals of CO_2 from the atmosphere, originating from both fossil and biogenic sources, are accounted for with a time interval of 100 years. Removal of carbon dioxide into growing trees and emissions of carbon dioxide corresponding to the content of biogenic carbon in the product is reported as CO_2 removals and biogenic CO_2 emissions, respectively.

WASTE MANAGEMENT SCENARIO The waste management is calculated based on the sales of TENA products on the EU market, with an average waste handling for EU 27 (EUROSTAT 2019) giving a scenario with 55 % incineration and 45 % landfill.

Impacts of incineration process with energy recovery are attributed 50 % to the product and 50 % to the energy recovery process. Benefits and credits of energy recovery are attributed 100 % to energy recovery (outside system boundaries).

Emissions of biogenic CO₂ associated with waste management, is reported.

REPRESENTATIVE PRODUCT

A representative product is chosen when there are minor variations for the same product, such as technology and packaging. In the EPD, the representation of such different TENA products is done by a representative product, i.e. more than one product can be represented by the same calculation. The representative product always has the highest environmental impact, and hence a conservative approach is taken for the results. However, the variations within the different tiered products is not more than +/- 10 %, which follows the General Programme Instructions.

LIST OF MATERIALS The materials listed in the composition table are combined into three groups to keep a level of confidentiality. A general list of content is also shown.

For the life cycle calculations each product's particular specification have been

used.

PACKAGING

The packaging consists of a consumer pack, a polyethylene plastic bag, and transport packaging of corrugated board boxes, i.e., made of renewable fibers. A few articles of TENA Men, TENA Female Pads and Liners have a consumer pack of carton from renewable fibers. Different levels of recycled plastic materials are used in the consumer pack.

MANUFACTURING SITES

The TENA assortment is produced in the following factories; Falkenberg/ Sweden Gennep/Netherlands, Olawa/Poland, Gemerská Hôrka/Slovakia,

Hoogezand/Netherlands, Valls/Spain, Drumondville/Canada. All production sites are certified with management systems for quality, environment and health and

safety, ISO 9001, ISO 14001 and ISO 18001.

GEOGRAPHICAL SCOPE

This EPD covers TENA products sold in Europe.

VALIDITY OF DATA

The most important raw materials in the products, pulp and SAP, are mainly data from 2018-2021. Supplier data for raw materials like film and nonwoven as well as other, minor materials may be some years older. Manufacturing data are from 2022. Article specifications are from 2023.

THOUSAND SEPARATOR AND DECIMAL MARK SI style (French version): 1 234,56;

i.e. comma is used as decimal mark. Number of value digits: 3





Additional environmental information



WOOD PULP: Essity works with a strict sourcing policy and only use fibers from known sources. The suppliers are expected to continually increase the proportion of certified fibers from recognized certification schemes.

Certifications: All fluff pulp suppliers for TENA products are FSC Chain-of-Custody certified and all pulp meet as a minimum the FSC controlled wood standard, in addition to other forest certification schemes that may be applied.

ECF pulp: All pulps used for TENA products are produced in Elementary Chlorine Free (ECF) processes.

PLASTIC MATERIALS: All the plastic materials used in TENA products for the European market do not intentionally contain lead, hexavalent chrome and related compounds, phthalates, acrylamide, antimony, brominated flame retardants, or organotin compounds, except in form of impurities. The additives used in plastics comply with the EC Regulations No. 1272/2008 and No. 1907/2006 (REACH), and their subsequent amendments.

Lotions, creams and/or deodorant substances are not added to the products. Inks or dyes that may be present are used for functional requirements and not for aesthetic-commercial purposes.

PACKAGING: Packaging meets the requirements of Annex F of part IV, Legislative Decree 152/2006. Corrugated board boxes for transport packaging are made of at least 80 % recycled fibers

2024: Revision of TENA FPDs

The TENA EPDs were first published in 2015, and the number of articles for the TENA product groups have increased over the years. A general revision was done in 2020 with the validity to 2025, but now all EPDs are revised again. There are new rules and guidance for the environmental impact categories to which the calculations have been adapted, e.g., handling biogenic carbon, acidification and eutrophication potentials. This alters to some extent the environmental profile of the products. However, a follow up of the carbon footprint of TENA products (Environmental achievements, page 6) show significant reductions between the years 2008 and 2022 since the continuous product development cover new and better product designs, with less use of material, improved production by suppliers and improvements at TENA manufacturing sites.





Environmental Product Declaration Verification & Programme Information

The calculations for the environmental product declaration (EPD) are performed according to ISO 14040 and ISO 14044, ISO 14025.

EPD's within the same product category but from different programmes may not be comparable.



Divl

Product category rules (PCR): Absorbent Hygiene Products, 2011:14, version 3.01, UN CPC 32193 General Programme Instructions ver.4.01

Programme operator: EPD International AB, Box 210 60, SE-100 31 Stockholm, Sweden e-mail: info@environdec.com

Product Category Rules review was conducted by:

The Technical Committee of the International EPD® System. Chair: Massimo Marino Contact via info@environdec.com

Independent verification of the declaration and data, according to ISO 14025:2006:

□ EPD process certification

⋈ EPD verification

Procedure for follow up of data during EPD validity involves third party verifier:

□Yes

 \boxtimes No

Third party verifier:

Håkan Stripple at IVL Swedish Environmental Research Institute, P.O. Box 53021, SE-400 14 Gothenburg, Sweden

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Accredited by:

Håkan Stripple is an independent individual verifier in the International EPD® System.

Declaration owner:

Essity Hygiene & Health AB SE-405 03 GÖTEBORG

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The EPD owner has the sole ownership, liability, and responsibility for the EPD





TENA Bed – environmental performance

Provides protection for beds and chairs against accidental urine loss and during hygiene procedures. Dermatologically tested so it is gentle to the skin. Available in a range of sizes and absorbency levels.

Composition for TENA Specific data is used in	· · · · · · · · · · · · · · · · · · ·			
Pulp 61 - 79 %				
Polymers	2 - 4 %			
Plastics	19 - 36 %			

Content declaration
Calcium carbonate
Cellulose pulp
Glue
Ink
Polyethylene
Polypropylene
Super absorbent (part of assortment)
Synthetic elastics













1. TENA Bed Original 60 x 60

one absorbent product

Environmental impact category

Parameter		Unit	Upstream	Core	Downstream	Total
Global warming potential (GWP)	Fossil	kg CO ₂ eq.	0,041	0,006	0,014	0,062
	Biogenic	kg CO ₂ eq.	-0,047	0,000	0,059	0,013
	Land use and land transformation	kg CO ₂ eq.	0,00001	0,00002	0,00006	0,00009
	Total	kg CO₂ eq.	-0,005	0,006	0,073	0,075
Acidification potential (AP)		mol H ⁺ eq.	1,97E-04	1,22E-04	3,48E-05	3,54E-04
Eutrophication potential (EP), freshwater		kg P eq.	2,83E-06	3,53E-08	9,47E-08	2,96E-06
Eutrophication potential (EP), marine		kg N eq.	4,97E-05	3,06E-05	3,75E-05	1,18E-04
Eutrophication potentia	Eutrophication potential (EP), terrestrial		4,49E-04	3,32E-04	1,68E-04	9,50E-04
Formation potential of to (POCP)	ropospheric ozone	kg NMVOC eq.	1,38E-04	8,47E-05	4,01E-05	2,63E-04
Ozone depletion potential (ODP)		CFC-11 eq.	2,06E-10	1,50E-12	4,19E-11	2,49E-10
Abiotic depletion potential - Minerals and metals (ADP-elements)		kg Sb eq.	7,32E-09	5,58E-09	1,44E-09	1,43E-08
Abiotic depletion potent (ADP-fossil fuels)	tial - Fossil fuels	MJ, net calorofic value	9,90E-01	8,54E-02	9,79E-02	1,17E+00
Water scarcity potential		m³ eq.	1,50E-01	2,59E-03	4,21E-03	1,56E-01

Parameter		Unit	Upstream	Core	Downstream	Total
Primary energy resources - Renewable	Used as energy carrier	MJ, net calorofic value	5,83E-01	3,14E-01	8,09E-03	9,05E-01
	Used as raw materials	MJ, net calorofic value	4,45E-01	(N/A)	(N/A)	4,45E-01
	Total	MJ, net calorofic value	1,03E+00	3,14E-01	8,09E-03	1,35E+00
Primary energy	Used as energy carrier	MJ, net calorofic value	9,91E-01	8,56E-02	9,81E-02	1,17E+00
Primary energy resources - Non-renewable	Used as raw materials	MJ, net calorofic value	(N/A)	(N/A)	(N/A)	(N/A)
NOII-TETIEWADIE	Total	MJ, net calorofic value	9,91E-01	8,56E-02	9,81E-02	1,17E+00





2. TENA Bed Original 60 x 90

one absorbent product

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Parameter		Unit	Upstream	Core	Downstream	Total
	Fossil	kg CO ₂ eq.	0.066	0.010	0.023	0.099
Global warming	F055II	kg CO ₂ eq.	0,000	0,010	0,023	0,099
	Biogenic	kg CO ₂ eq.	-0,070	0,000	0,090	0,019
potential (GWP)	Land use and land transformation	kg CO ₂ eq.	0,00002	0,00002	0,00008	0,00013
	Total	kg CO₂ eq.	-0,004	0,010	0,112	0,119
Acidification potential (AP)		mol H ⁺ eq.	3,13E-04	1,85E-04	5,32E-05	5,51E-04
Eutrophication potential (EP), freshwater		kg P eq.	4,31E-06	5,52E-08	1,54E-07	4,52E-06
Eutrophication potentia	(EP), marine	kg N eq.	7,75E-05	4,66E-05	5,70E-05	1,81E-04
Eutrophication potentia	(EP), terrestrial	mol N eq.	7,06E-04	5,06E-04	2,56E-04	1,47E-03
Formation potential of tr (POCP)	opospheric ozone	kg NMVOC eq.	2,17E-04	1,29E-04	6,11E-05	4,07E-04
Ozone depletion potential (ODP)		CFC-11 eq.	3,33E-10	2,35E-12	6,35E-11	3,98E-10
Abiotic depletion potential - Minerals and metals (ADP-elements)		kg Sb eq.	1,16E-08	8,76E-09	2,18E-09	2,25E-08
Abiotic depletion potential - Fossil fuels (ADP-fossil fuels)		MJ, net calorofic value	1,62E+00	1,31E-01	1,49E-01	1,90E+00
Water scarcity potential		m³ eq.	2,34E-01	4,07E-03	6,68E-03	2,45E-01

Parameter		Unit	Upstream	Core	Downstream	Total
Primary energy resources - Renewable	Used as energy carrier	MJ, net calorofic value	8,93E-01	4,94E-01	1,24E-02	1,40E+00
	Used as raw materials	MJ, net calorofic value	6,76E-01	(N/A)	(N/A)	6,76E-01
	Total	MJ, net calorofic value	1,57E+00	4,94E-01	1,24E-02	2,07E+00
Primary energy resources - Non-renewable	Used as energy carrier	MJ, net calorofic value	1,62E+00	1,31E-01	1,50E-01	1,91E+00
	Used as raw materials	MJ, net calorofic value	(N/A)	(N/A)	(N/A)	(N/A)
	Total	MJ, net calorofic value	1,62E+00	1,31E-01	1,50E-01	1,91E+00





3. TENA Bed Normal 60 x 60

one absorbent product

Environmental impact category

Parameter		Unit	Upstream	Core	Downstream	Total
Global warming	Fossil	kg CO ₂ eq.	0,047	0,007	0,016	0,070
	Biogenic	kg CO ₂ eq.	-0,053	0,000	0,067	0,014
potential (GWP)	Land use and land transformation	kg CO ₂ eq.	0,00002	0,00002	0,00006	0,00010
	Total	kg CO ₂ eq.	-0,006	0,007	0,083	0,084
Acidification potential (AP)		mol H ⁺ eq.	2,23E-04	1,35E-04	3,89E-05	3,97E-04
Eutrophication potential (EP), freshwater		kg P eq.	3,17E-06	3,95E-08	1,07E-07	3,31E-06
Eutrophication potential (EP), marine		kg N eq.	5,62E-05	3,40E-05	4,19E-05	1,32E-04
Eutrophication potentia	(EP), terrestrial	mol N eq.	5,07E-04	3,69E-04	1,88E-04	1,06E-03
Formation potential of to (POCP)	opospheric ozone	kg NMVOC eq.	1,55E-04	9,41E-05	4,48E-05	2,94E-04
Ozone depletion potential (ODP)		CFC-11 eq.	2,43E-10	1,68E-12	4,67E-11	2,91E-10
Abiotic depletion potential - Minerals and metals (ADP-elements)		kg Sb eq.	8,56E-09	6,26E-09	1,60E-09	1,64E-08
Abiotic depletion potential - Fossil fuels (ADP-fossil fuels)		MJ, net calorofic value	1,12E+00	9,51E-02	1,10E-01	1,33E+00
Water scarcity potential		m³ eq.	1,73E-01	2,90E-03	4,75E-03	1,81E-01

Parameter		Unit	Upstream	Core	Downstream	Total
Primary energy resources - Renewable	Used as energy carrier	MJ, net calorofic value	6,50E-01	3,52E-01	9,05E-03	1,01E+00
	Used as raw materials	MJ, net calorofic value	4,95E-01	(N/A)	(N/A)	4,95E-01
	Total	MJ, net calorofic value	1,15E+00	3,52E-01	9,05E-03	1,51E+00
Primary onorgy	Used as energy carrier	MJ, net calorofic value	1,12E+00	9,53E-02	1,10E-01	1,33E+00
Primary energy resources - Non-renewable	Used as raw materials	MJ, net calorofic value	(N/A)	(N/A)	(N/A)	(N/A)
	Total	MJ, net calorofic value	1,12E+00	9,53E-02	1,10E-01	1,33E+00





4. TENA Bed Normal 60 x 90

one absorbent product

Environmental impact category

Parameter		Unit	Upstream	Core	Downstream	Total
Global warming potential (GWP)	Fossil	kg CO₂ eq.	0,066	0,010	0,023	0,099
	Biogenic	kg CO ₂ eq.	-0,070	0,000	0,090	0,019
	Land use and land transformation	kg CO ₂ eq.	0,00002	0,00002	0,00008	0,00013
	Total	kg CO ₂ eq.	-0,004	0,010	0,112	0,119
Acidification potential (AP)		mol H ⁺ eq.	3,13E-04	1,85E-04	5,32E-05	5,51E-04
Eutrophication potential (EP), freshwater		kg P eq.	4,31E-06	5,52E-08	1,54E-07	4,52E-06
Eutrophication potential (EP), marine		kg N eq.	7,75E-05	4,66E-05	5,70E-05	1,81E-04
Eutrophication potential	l (EP), terrestrial	mol N eq.	7,06E-04	5,06E-04	2,56E-04	1,47E-03
Formation potential of tr (POCP)	opospheric ozone	kg NMVOC eq.	2,17E-04	1,29E-04	6,11E-05	4,07E-04
Ozone depletion potential (ODP)		CFC-11 eq.	3,33E-10	2,35E-12	6,35E-11	3,99E-10
Abiotic depletion potential - Minerals and metals (ADP-elements)		kg Sb eq.	1,16E-08	8,76E-09	2,18E-09	2,25E-08
Abiotic depletion potential - Fossil fuels (ADP-fossil fuels)		MJ, net calorofic value	1,62E+00	1,31E-01	1,49E-01	1,90E+00
Water scarcity potential		m³ eq.	2,34E-01	4,07E-03	6,68E-03	2,45E-01

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Parameter		Unit	Upstream	Core	Downstream	Total
Primary energy resources - Renewable	Used as energy carrier	MJ, net calorofic value	8,93E-01	4,94E-01	1,24E-02	1,40E+00
	Used as raw materials	MJ, net calorofic value	6,76E-01	(N/A)	(N/A)	6,76E-01
	Total	MJ, net calorofic value	1,57E+00	4,94E-01	1,24E-02	2,07E+00
Primary energy resources - Non-renewable	Used as energy carrier	MJ, net calorofic value	1,62E+00	1,31E-01	1,50E-01	1,91E+00
	Used as raw materials	MJ, net calorofic value	(N/A)	(N/A)	(N/A)	(N/A)
	Total	MJ, net calorofic value	1,62E+00	1,31E-01	1,50E-01	1,91E+00





one absorbent product

Environmental impact category

Parameter		Unit	Upstream	Core	Downstream	Total
	Fossil	kg CO ₂ eq.	0,035	0,006	0,012	0,052
potential (GWP)	Biogenic	kg CO ₂ eq.	-0,040	0,000	0,051	0,011
	Land use and land transformation	kg CO ₂ eq.	0,00001	0,00001	0,00005	0,00007
	Total	kg CO ₂ eq.	-0,005	0,006	0,063	0,063
Acidification potential (AP)		mol H ⁺ eq.	1,66E-04	1,05E-04	2,96E-05	3,01E-04
Eutrophication potential (EP), freshwater		kg P eq.	2,46E-06	2,98E-08	7,93E-08	2,57E-06
Eutrophication potential (EP), marine		kg N eq.	4,20E-05	2,64E-05	3,20E-05	1,00E-04
Eutrophication potential (EP), terrestrial		mol N eq.	3,79E-04	2,87E-04	1,43E-04	8,09E-04
Formation potential of tropospheric ozone (POCP)		kg NMVOC eq.	1,16E-04	7,31E-05	3,41E-05	2,23E-04
Ozone depletion potential (ODP)		CFC-11 eq.	1,84E-10	1,26E-12	3,57E-11	2,21E-10
Abiotic depletion potential - Minerals and metals (ADP-elements)		kg Sb eq.	6,72E-09	4,71E-09	1,23E-09	1,27E-08
Abiotic depletion potent (ADP-fossil fuels)	tial - Fossil fuels	MJ, net calorofic value	8,10E-01	7,30E-02	8,33E-02	9,66E-01
Water scarcity potential		m³ eq.	1,42E-01	2,18E-03	3,56E-03	1,48E-01

Parameter		Unit	Upstream	Core	Downstream	Total
Primary energy resources - Renewable	Used as energy carrier	MJ, net calorofic value	4,94E-01	2,65E-01	6,86E-03	7,66E-01
	Used as raw materials	MJ, net calorofic value	3,79E-01	(N/A)	(N/A)	3,79E-01
	Total	MJ, net calorofic value	8,73E-01	2,65E-01	6,86E-03	1,14E+00
Primary energy resources - Non-renewable	Used as energy carrier	MJ, net calorofic value	8,10E-01	7,31E-02	8,35E-02	9,67E-01
	Used as raw materials	MJ, net calorofic value	(N/A)	(N/A)	(N/A)	(N/A)
Non-renewable	Total	MJ, net calorofic value	8,10E-01	7,31E-02	8,35E-02	9,67E-01





one absorbent product

Parameter		Unit	Upstream	Core	Downstream	Total
Fossil		kg CO ₂ eq.	0,050	0,009	0,016	0,075
Global warming potential (GWP)	Biogenic	kg CO ₂ eq.	-0,064	0,000	0,081	0,017
	Land use and land transformation	kg CO ₂ eq.	0,00002	0,00002	0,00007	0,00011
	Total	kg CO ₂ eq.	-0,014	0,009	0,097	0,092
Acidification potential (AP)		mol H ⁺ eq.	2,42E-04	1,65E-04	4,51E-05	4,52E-04
Eutrophication potential (EP), freshwater		kg P eq.	3,82E-06	4,51E-08	1,12E-07	3,98E-06
Eutrophication potential (EP), marine		kg N eq.	6,35E-05	4,12E-05	4,97E-05	1,54E-04
Eutrophication potential (EP), terrestrial		mol N eq.	5,64E-04	4,48E-04	2,18E-04	1,23E-03
Formation potential of tropospheric ozone (POCP)		kg NMVOC eq.	1,73E-04	1,14E-04	5,25E-05	3,39E-04
Ozone depletion potential (ODP)		CFC-11 eq.	2,46E-10	1,90E-12	5,61E-11	3,04E-10
Abiotic depletion potential - Minerals and metals (ADP-elements)		kg Sb eq.	9,91E-09	7,10E-09	1,91E-09	1,89E-08
Abiotic depletion potent (ADP-fossil fuels)	ial - Fossil fuels	MJ, net calorofic value	1,12E+00	1,12E-01	1,27E-01	1,36E+00
Water scarcity potential		m³ eq.	1,90E-01	3,29E-03	5,29E-03	1,99E-01

Resources									
Parameter		Unit	Upstream	Соге	Downstream	Total			
Primary energy resources - Renewable	Used as energy carrier	MJ, net calorofic value	7,64E-01	3,99E-01	1,04E-02	1,17E+00			
	Used as raw materials	MJ, net calorofic value	5,93E-01	(N/A)	(N/A)	5,93E-01			
	Total	MJ, net calorofic value	1,36E+00	3,99E-01	1,04E-02	1,77E+00			
Primary energy resources - Non-renewable	Used as energy carrier	MJ, net calorofic value	1,12E+00	1,13E-01	1,27E-01	1,36E+00			
	Used as raw materials	MJ, net calorofic value	(N/A)	(N/A)	(N/A)	(N/A)			
	Total	MJ, net calorofic value	1,12E+00	1,13E-01	1,27E-01	1,36E+00			





one absorbent product

Environmental impact category

Parameter		Unit	Upstream	Core	Downstream	Total
Fossil		kg CO ₂ eq.	0,066	0,011	0,022	0,098
Global warming	Biogenic	kg CO ₂ eq.	-0,079	0,000	0,100	0,022
potential (GWP)	Land use and land transformation	kg CO ₂ eq.	0,00002	0,00003	0,00009	0,00014
	Total	kg CO ₂ eq.	-0,013	0,011	0,122	0,120
Acidification potential (AP)		mol H ⁺ eq.	3,17E-04	2,10E-04	5,72E-05	5,85E-04
Eutrophication potential (EP), freshwater		kg P eq.	4,82E-06	5,86E-08	1,50E-07	5,03E-06
Eutrophication potential (EP), marine		kg N eq.	8,08E-05	5,26E-05	6,30E-05	1,96E-04
Eutrophication potential (EP), terrestrial		mol N eq.	7,28E-04	5,72E-04	2,75E-04	1,57E-03
Formation potential of tropospheric ozone (POCP)		kg NMVOC eq.	2,24E-04	1,46E-04	6,64E-05	4,36E-04
Ozone depletion potential (ODP)		CFC-11 eq.	3,18E-10	2,49E-12	7,12E-11	3,92E-10
Abiotic depletion potential - Minerals and metals (ADP-elements)		kg Sb eq.	1,22E-08	9,28E-09	2,42E-09	2,39E-08
Abjotic depletion potential - Fossil fuels		MJ, net calorofic value	1,51E+00	1,44E-01	1,60E-01	1,81E+00
Water scarcity potential		m³ eq.	2,42E-01	4,30E-03	6,93E-03	2,53E-01

Parameter		Unit	Upstream	Core	Downstream	Total
Primary energy resources - Renewable	Used as energy carrier	MJ, net calorofic value	9,78E-01	5,22E-01	1,32E-02	1,51E+00
	Used as raw materials	MJ, net calorofic value	7,58E-01	(N/A)	(N/A)	7,58E-01
	Total	MJ, net calorofic value	1,74E+00	5,22E-01	1,32E-02	2,27E+00
Primary energy resources - Non-renewable	Used as energy carrier	MJ, net calorofic value	1,51E+00	1,44E-01	1,60E-01	1,81E+00
	Used as raw materials	MJ, net calorofic value	(N/A)	(N/A)	(N/A)	(N/A)
	Total	MJ, net calorofic value	1,51E+00	1,44E-01	1,60E-01	1,81E+00





one absorbent product

Water scarcity potential

Environmental impact category **Parameter** Unit Upstream Downstream Total Fossil kg CO₂ eq. 0,078 0,013 0,026 0,118 -0,095 0,000 0,026 Biogenic kg CO2 eq. 0,121 **Global warming** potential (GWP) Land use and land kg CO2 eq. 0,00003 0,00003 0,00011 0,00017 transformation Total kg CO₂ eq. -0,017 0,013 0,148 0,144 Acidification potential (AP) 2,56E-04 6,89E-05 7,05E-04 3,81E-04 mol H⁺ eq. Eutrophication potential (EP), freshwater kg P eq. 5,83E-06 7,10E-08 1,80E-07 6,08E-06 Eutrophication potential (EP), marine 6,40E-05 kg N eq. 9,69E-05 7,63E-05 2,37E-04 Eutrophication potential (EP), terrestrial mol N eq. 8,74E-04 6,95E-04 3,32E-04 1,90E-03 Formation potential of tropospheric ozone kg NMVOC eq. 2,70E-04 1,77E-04 8,02E-05 5,27E-04 (POCP) Ozone depletion potential (ODP) CFC-11 eq. 3,66E-10 3,02E-12 8,66E-11 4,56E-10 Abiotic depletion potential - Minerals and metals kg Sb eq. 2,93E-09 1,43E-08 1,13E-08 2,84E-08 (ADP-elements) Abiotic depletion potential - Fossil fuels MJ, net calorofic value 1,80E+00 1,75E-01 1,92E-01 2,17E+00 (ADP-fossil fuels)

Resources								
Parameter		Unit	Upstream	Соге	Downstream	Total		
Primary energy resources - Renewable	Used as energy carrier	MJ, net calorofic value	1,19E+00	6,34E-01	1,59E-02	1,84E+00		
	Used as raw materials	MJ, net calorofic value	9,23E-01	(N/A)	(N/A)	9,23E-01		
	Total	MJ, net calorofic value	2,11E+00	6,34E-01	1,59E-02	2,76E+00		
Primary energy resources -	Used as energy carrier	MJ, net calorofic value	1,80E+00	1,75E-01	1,93E-01	2,17E+00		
	Used as raw materials	MJ, net calorofic value	(N/A)	(N/A)	(N/A)	(N/A)		
Non-renewable	Total	MJ, net calorofic value	1,80E+00	1,75E-01	1,93E-01	2,17E+00		

m3 eq.

2,76E-01

5,22E-03

8,37E-03

2,89E-01





9. TENA Bed Super 60 x 75

one absorbent product

Environmental impact category

Parameter		Unit	Upstream	Core	Downstream	Total
Global warming	Fossil	kg CO ₂ eq.	0,069	0,013	0,023	0,105
	Biogenic	kg CO₂ eq.	-0,094	0,000	0,121	0,027
potential (GWP)	Land use and land transformation	kg CO ₂ eq.	0,00002	0,00003	0,00010	0,00016
	Total	kg CO₂ eq.	-0,024	0,013	0,143	0,132
Acidification potential (AP)		mol H ⁺ eq.	3,54E-04	2,55E-04	6,49E-05	6,73E-04
Eutrophication potential (EP), freshwater		kg P eq.	5,62E-06	6,84E-08	1,55E-07	5,84E-06
Eutrophication potential (EP), marine		kg N eq.	9,05E-05	6,35E-05	7,53E-05	2,29E-04
Eutrophication potential (EP), terrestrial		mol N eq.	8,12E-04	6,90E-04	3,12E-04	1,81E-03
Formation potential of tropospheric ozone (POCP)		kg NMVOC eq.	2,52E-04	1,76E-04	7,71E-05	5,06E-04
Ozone depletion potential (ODP)		CFC-11 eq.	3,02E-10	2,90E-12	8,76E-11	3,92E-10
Abiotic depletion potential - Minerals and metals (ADP-elements)		kg Sb eq.	1,11E-08	1,08E-08	2,90E-09	2,49E-08
Abiotic depletion potent (ADP-fossil fuels)	ial - Fossil fuels	MJ, net calorofic value	1,52E+00	1,71E-01	1,79E-01	1,87E+00
Water scarcity potential		m³ eq.	2,20E-01	5,03E-03	7,83E-03	2,32E-01

Parameter		Unit	Upstream	Core	Downstream	Total
	Used as energy carrier	MJ, net calorofic value	1,18E+00	6,10E-01	1,48E-02	1,81E+00
Primary energy resources - Renewable	Used as raw materials	MJ, net calorofic value	9,40E-01	(N/A)	(N/A)	9,40E-01
	Total	MJ, net calorofic value	2,12E+00	6,10E-01	1,48E-02	2,75E+00
Primary energy resources - Non-renewable	Used as energy carrier	MJ, net calorofic value	1,52E+00	1,71E-01	1,80E-01	1,87E+00
	Used as raw materials	MJ, net calorofic value	(N/A)	(N/A)	(N/A)	(N/A)
	Total	MJ, net calorofic value	1,52E+00	1,71E-01	1,80E-01	1,87E+00





10. TENA Bed Super / Super Secure Zone 60 x 90

one absorbent product

Environmental impact category

Parameter		Unit	Upstream	Core	Downstream	Total
Global warming potential (GWP)	Fossil	kg CO₂ eq.	0,084	0,016	0,027	0,127
	Biogenic	kg CO ₂ eq.	-0,120	0,000	0,153	0,033
	Land use and land transformation	kg CO₂ eq.	0,00003	0,00004	0,00013	0,00020
	Total	kg CO ₂ eq.	-0,036	0,016	0,179	0,160
Acidification potential (AP)		mol H ⁺ eq.	4,25E-04	3,18E-04	8,20E-05	8,25E-04
Eutrophication potential (EP), freshwater		kg P eq.	7,14E-06	8,34E-08	1,88E-07	7,41E-06
Eutrophication potential (EP), marine		kg N eq.	1,12E-04	7,93E-05	9,39E-05	2,85E-04
Eutrophication potential (EP), terrestrial		mol N eq.	9,93E-04	8,62E-04	3,94E-04	2,25E-03
Formation potential of tr (POCP)	opospheric ozone	kg NMVOC eq.	3,07E-04	2,20E-04	9,68E-05	6,24E-04
Ozone depletion potential (ODP)		CFC-11 eq.	3,60E-10	3,53E-12	1,08E-10	4,72E-10
Abiotic depletion potential - Minerals and metals (ADP-elements)		kg Sb eq.	1,55E-08	1,32E-08	3,62E-09	3,23E-08
Abiotic depletion potential - Fossil fuels (ADP-fossil fuels)		MJ, net calorofic value	1,79E+00	2,12E-01	2,28E-01	2,22E+00
Water scarcity potential		m³ eq.	2,81E-01	6,11E-03	9,53E-03	2,97E-01

Parameter		Unit	Upstream	Core	Downstream	Total
	Used as energy carrier	MJ, net calorofic value	1,45E+00	7,41E-01	1,86E-02	2,21E+00
Primary energy resources - Renewable	Used as raw materials	MJ, net calorofic value	1,15E+00	(N/A)	(N/A)	1,15E+00
	Total	MJ, net calorofic value	2,60E+00	7,41E-01	1,86E-02	3,36E+00
Primary energy resources - Non-renewable	Used as energy carrier	MJ, net calorofic value	1,79E+00	2,12E-01	2,28E-01	2,23E+00
	Used as raw materials	MJ, net calorofic value	(N/A)	(N/A)	(N/A)	(N/A)
	Total	MJ, net calorofic value	1,79E+00	2,12E-01	2,28E-01	2,23E+00





11. TENA Bed 80 x 180 Secure Zone

one absorbent product

Environmental impact category

Parameter		Unit	Upstream	Core	Downstream	Total
Global warming potential (GWP)	Fossil	kg CO₂ eq.	0,133	0,020	0,047	0,200
	Biogenic	kg CO ₂ eq.	-0,133	0,000	0,170	0,036
	Land use and land transformation	kg CO ₂ eq.	0,00004	0,00005	0,00017	0,00026
	Total	kg CO₂ eq.	-0,001	0,020	0,217	0,236
Acidification potential (AP)		mol H ⁺ eq.	6,00E-04	3,57E-04	1,06E-04	1,06E-03
Eutrophication potential (EP), freshwater		kg P eq.	8,74E-06	1,09E-07	3,20E-07	9,17E-06
Eutrophication potential (EP), marine		kg N eq.	1,51E-04	9,03E-05	1,10E-04	3,51E-04
Eutrophication potential (EP), terrestrial		mol N eq.	1,38E-03	9,80E-04	5,09E-04	2,87E-03
Formation potential of to (POCP)	Formation potential of tropospheric ozone (POCP)		4,23E-04	2,49E-04	1,20E-04	7,92E-04
Ozone depletion potential (ODP)		CFC-11 eq.	5,27E-10	4,59E-12	1,20E-10	6,52E-10
Abiotic depletion potential - Minerals and metals (ADP-elements)		kg Sb eq.	2,25E-08	1,71E-08	4,19E-09	4,38E-08
Abiotic depletion potential - Fossil fuels (ADP-fossil fuels)		MJ, net calorofic value	3,37E+00	2,59E-01	2,99E-01	3,93E+00
Water scarcity potential		m³ eq.	3,98E-01	7,95E-03	1,33E-02	4,20E-01

Resources						
Parameter		Unit	Upstream	Core	Downstream	Total
Primary energy resources - Renewable	Used as energy carrier	MJ, net calorofic value	1,73E+00	9,64E-01	2,48E-02	2,72E+00
	Used as raw materials	MJ, net calorofic value	1,27E+00	(N/A)	(N/A)	1,27E+00
	Total	MJ, net calorofic value	3,00E+00	9,64E-01	2,48E-02	3,99E+00
Primary energy resources - Non-renewable	Used as energy carrier	MJ, net calorofic value	3,37E+00	2,59E-01	3,00E-01	3,93E+00
	Used as raw materials	MJ, net calorofic value	(N/A)	(N/A)	(N/A)	(N/A)
	Total	MJ, net calorofic value	3,37E+00	2,59E-01	3,00E-01	3,93E+00





References

- 1. PCR 2011:14 v. 3.01
- 2. General Programme Instructions for the International EPD® System v. 4.01
- ISO 14040:2006 Environmental management Life cycle assessment – Principles and framework
- 4. ISO 14044:2006 Environmental management Life cycle assessment Requirements and guidelines
- ISO 14025:2006 Environmental labels and declarations Type III environmental declarations – Principles and procedures
- 6. ISO 14020:2022 Environmental labels and declarations General principles
- 7. DPCM 12/01/17 G.U. n. 65 del 18 marzo 2017
- 8. www.environdec.com

Version	Revision Item
6	
7	New articles added (no new LCA calculations): TENA Bed Normal 60x60, art no 770045 TENA Bed Normal 60x90, art no 770047 TENA Bed Plus 60x40, art no 770114 TENA Bed Plus 60x60, art no 770109 TENA Bed Plus 60x90, art no 770111
8	All LCA calculations recalculated according new GPI on updated specifications. TENA Bed products with same size and absorption level merged, as example TENA Bed Plus and TENA Bed Plus secure zone in size 60x40 use same calculation. Similar for other sizes and absorption levels. New articles added: TENA Bed 80 x 180 Secure Zone, art no 771106 & 771107 Removed articles: TENA Bed Super 60 x 75 art 772531 Traversa Flufsan 80 x 180 art 360906
9	Exchanged some photos.







Use better, use less!

We create value for customers and consumers by increasing health and hygiene standards through our innovative solutions, and by sharing knowledge and promoting awareness.

We create business value by meeting societal needs and offering more people an opportunity to work, in better conditions, so they can provide for their families and live happier, fuller lives.

Since 2008 we are continuously reducing the carbon footprint of our absorbent product assortments over the whole product life cycle.

We strive for sustainable continence care with better products. Use better, use less.

