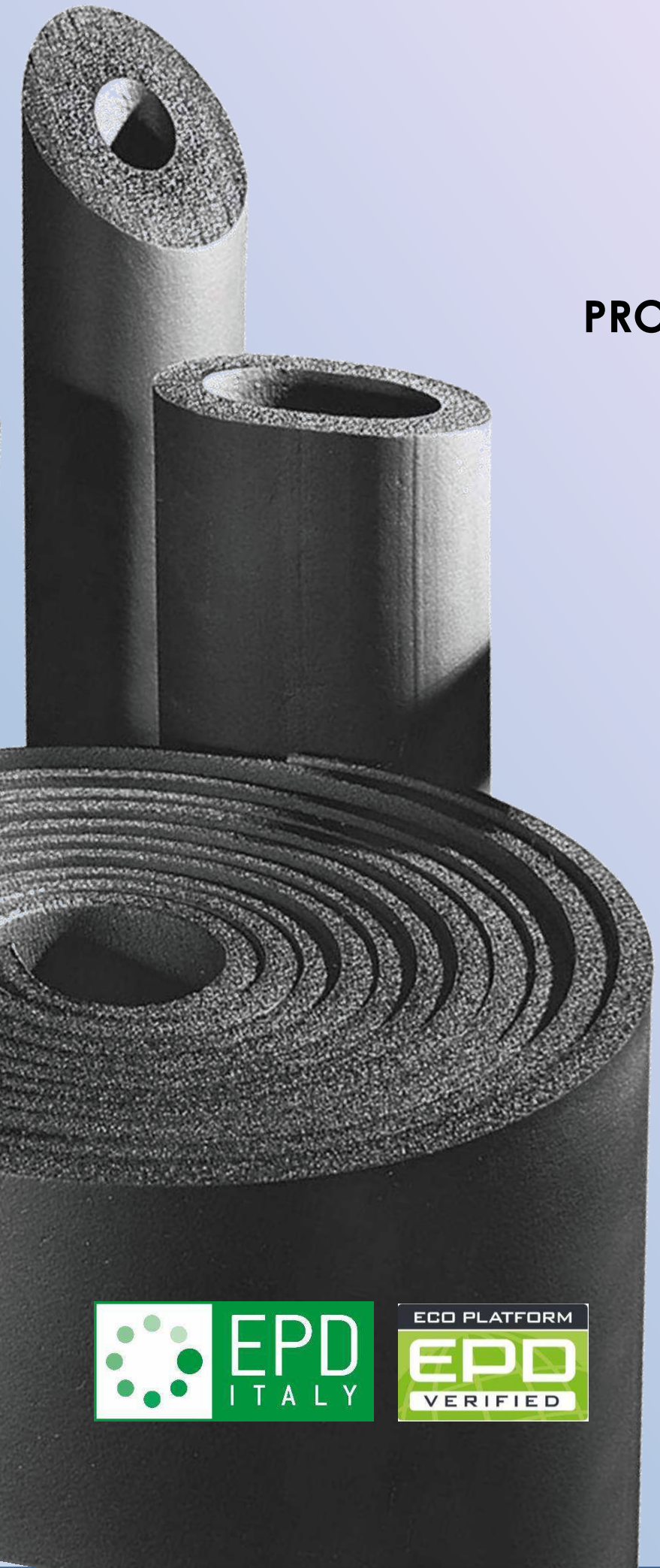


UNION FOAM S.p.A.

ENVIRONMENTAL PRODUCT DECLARATION

In compliance with
ISO 14025 and EN 15804+A2

Product name:
EUROBATEX®

Site plant:
UP1 Via dell'Industria 11
20882, Bellusco (MB)

Program Operator **EPDItaly**

Publisher **EPDItaly**

Declaration number
EUR001

Registration number
EPDITALY0093

UNCPC code **3623**

Issue date
21/02/2020

Update date
12/05/2023

Valid until
12/05/2028

GENERAL INFORMATION

EPD OWNER	**Union Foam S.p.A.** Registered office: Via Manzoni 43, 20121, Milano VAT No.: 02651770154
PLANT	UP1 Via dell'Industria 11, 20882, Bellusco (MB)
SCOPE OF APPLICATION	This document refers to 1 m3 of elastomeric material for thermal insulation of the EUROBATEX product line. The product range covered by the declaration consists of tubes in pipe sections and coils (also in self-adhesive version), thickness from 6 to 60 and I.D. from 6 to 170 mm, flat sheets or rolls (also with a self-adhesive backing), thickness from 6 to 60 mm. The product, extruded and foamed without the use of CFC and HCFC, is particularly suitable for the thermal insulation of refrigeration, air-conditioning and heating & plumbing services in commercial, industrial and domestic applications.
PROGRAM OPERATOR	EPDITALY
INDEPENDENT VERIFICATION	This statement was written following the general instructions of the EPD Italy program. Independent verification of the declaration according to ISO 14025: 2010 ☐Internal ☒External Third-party verification performed by: ICMQ SpA, via De Castillia, 10 – 20124 Milano (www.icmq.it). Accredited by Accredia
UNCPC CODE	3623 Tubes, pipes and hoses of vulcanized rubber other than hard rubber
CORPORATE CONTACT	Union Foam S.p.A., via dell'Industria 11, 20882 Bellusco (MB); tel. +39 039 620891; commerciale@unionfoam.it
TECHNICAL SUPPORT	Federica Gilardelli, LCA study director, Greenwich S.r.l., operational headquarters: Via Presolana 2/4, 24030, Medolago (BG); registered office via Vittorio Emanuele II, 179, 24033 Calusco d'Adda – Bergamo; info@greenwichsrl.it
COMPARABILITY	Environmental declarations published within the same product category, but from different programs, may not be comparable. In particular, EPD of construction products may not be comparable if not compliant with EN 15804.
LIABILITY	UNION FOAM Spa relieves EPDItaly from any non-compliance with environmental legislation. The holder of the declaration will be responsible for the information and supporting evidence; EPDItaly declines all responsibility regarding the manufacturer's information, data and results of the life cycle assessment.
PCR AND REFERENCE DOCUMENT	This declaration was written following the EPDItaly Program Regulations rev. 5.2 dated 16/02/2022, available on the website www.epditaly.it. PCR ICMQ-001/15 rev 3 Prodotti da costruzione e servizi per costruzione, EPD Italy. Data di emissione: 02/12/2019. The EN 15804:2012 Standard – Sustainability of construction works. Environmental product declarations. Core rules for the product category of construction products. – represents the framework reference for PCR.

COMPANY

Union Foam S.p.A., with their vast experience in research and testing, and thanks to the development of innovative and highly technological products, is now a european market leader in this field and is constantly growing on the market.

The company's products and systems are specifically designed to prevent condensation, limit energy loss, control noise and vibrations and to protect the environment. They are used in a wide range of both domestic and industrial applications (heating and plumbing, air conditioning, refrigeration, oil, petrochemical, shipyards and railways).

Certification bodies, qualified both on a national and international level, guarantee the quality and performance of all products in accordance with the regulations in force.

The versatility of the production plants together with a customer oriented focus, allow the company to satisfy worldwide-customer requirements. The product range meet the needs and comply with the regulations of all of the countries in which Union Foam has established their presence.

Thanks to their network of agents and distributors, Union Foam is now a leading company in the major world wide markets promoting their "Made in Italy" products.



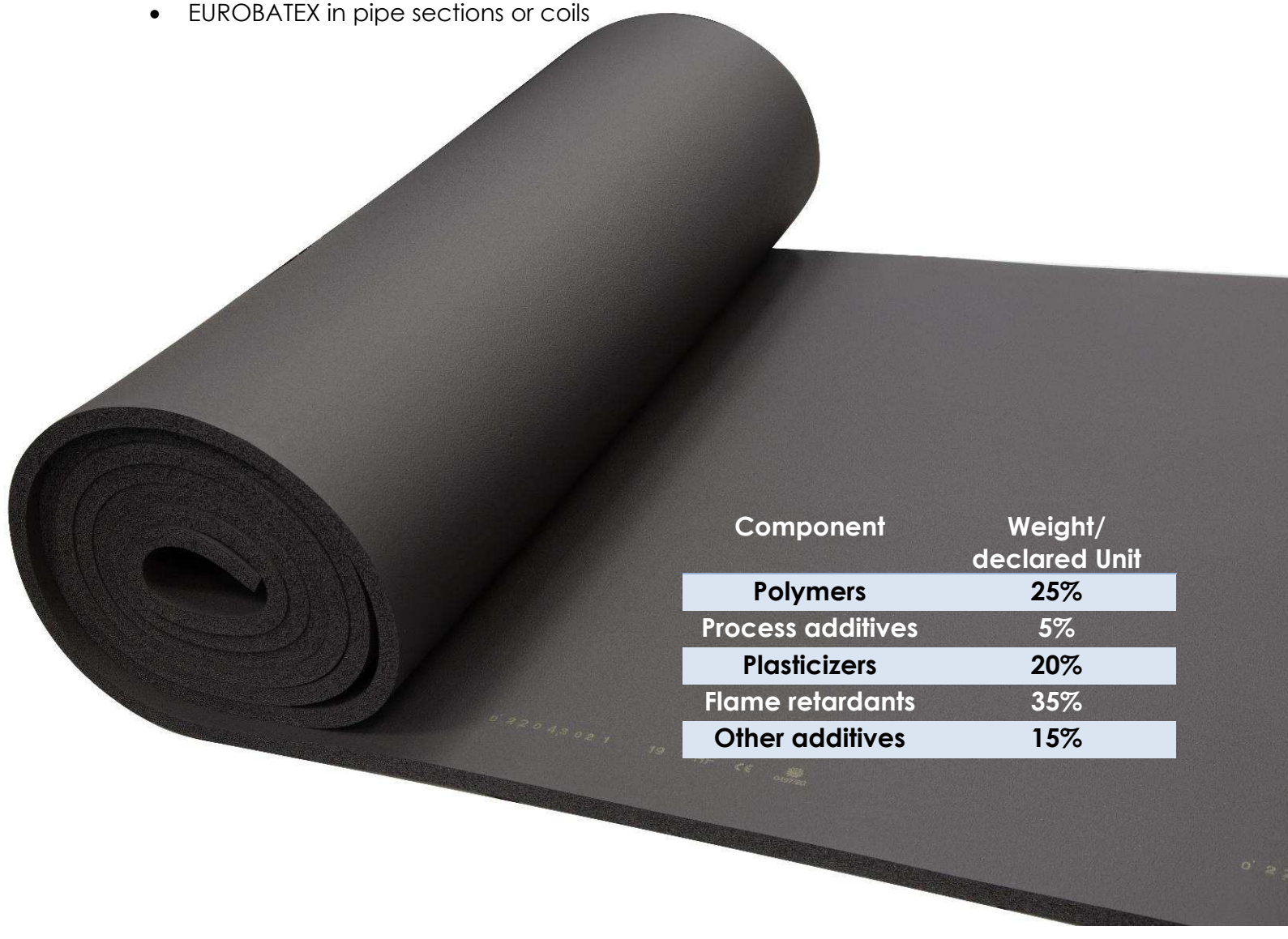
PRODUCT AND

PRODUCTION PROCESS DESCRIPTION

The LCA study and consequently the assessment of the environmental impact relating to EUROBATEX, relates to the following products:

- EUROBATEX flat sheets or rolls
- EUROBATEX flat sheets or rolls with SELF-ADHESIVE backing
- EUROBATEX pipe slit, SELF-ADHESIVE on one side (AD1)
- EUROBATEX pipe slit SELF-ADHESIVE on both sides (AD2)
- EUROBATEX pipe slit SELF-ADHESIVE (AD2) + rubber foam OVERLAP (ADG)
- EUROBATEX in pipe sections or coils

Type of material	Black closed-cell flexible elastomeric foam (FEF).
Products	Tubes in pipes sections (also in a self-adhesive version) and coils with thicknesses from 6 to 60 mm and diameters from 6 to 170 mm. Flat sheets or rolls (also in a self-adhesive version) with thicknesses from 6 to 60 mm.
Fields of application	Thermal insulation of refrigeration, air-conditioning and heat & plumbing services in commercial, industrial and domestic applications.
Dimensional tolerances	In accordance with the European Standard EN 14304.
Environmental information	Flexible and expanded CFC and HCFC-free rubber foam. It does not damage the ozone layer (ODP zero) and does not contribute to the greenhouse effect (GWP zero).
Additional information	Self-adhesive material: the self-adhesive coating is based on modified acrylate reinforced with mesh structure. Protection liner made of polyethylene or paper foil. Traces of silicon can be found on the foil protecting the self-adhesive coating.
Storage conditions/shelf life	Store the material in a dry and clean environment at a temperature between 0 °C and 35 °C and a RH between 50% and 70%. Do not expose the material to heat or direct sunlight before installing. Self-adhesive products should not be kept in storage for more than one year.



Component	Weight/ declared Unit
Polymers	25%
Process additives	5%
Plasticizers	20%
Flame retardants	35%
Other additives	15%

PHYSICAL PROPERTIES	RESULT OBTAINED		TEST METHOD
OPERATING TEMPERATURE RANGE*	-45 °C +110 °C		EN 14706 / EN 14707
THERMAL CONDUCTIVITY	At a mean temperature of 0 °C	Tubes thk. ≤25 mm: λ ≤0,033 W/m·K Tubes thk. >25 mm: λ ≤0,035 W/m·K Sheets thk. ≤32 mm: λ ≤0,033 W/m·K Sheets thk. >32 mm: λ ≤0,034 W/m·K Tapes: λ ≤0,033 W/m·K	EN 12667 / EN ISO 8497
	At a mean temperature of +40 °C	Tubes thk. ≤25 mm: λ ≤0,037 W/m·K Tubes thk. >25 mm: λ ≤0,039 W/m·K Sheets thk. ≤32 mm: λ ≤0,037 W/m·K Sheets thk. >32 mm: λ ≤0,038 W/m·K Tapes: λ ≤0,037 W/m·K	
WATER VAPOUR DIFFUSION RESISTANCE FACTOR	Tubes thk. ≤19 mm: μ ≥ 10000 Sheets thk. ≤25 mm: μ ≥ 10000 Tapes: μ ≥ 10000 Tubes thk. ≥25 mm: μ ≥ 7000 Sheets thk. ≥30 mm: μ ≥ 7000		EN 13469 / EN 12086
WATER ABSORPTION	<0,1 kg/m²		EN 13472 / EN 1609
FIRE PERFORMANCE	**European Standard Euroclass**	Tubes: B_L-s2,d0 Sheets: B-s3,d0 Sheets 60 mm: E Sheets for linear application[1]: B_L-s2,d0 Tapes: B-s2,d0	EN 13501-1
	FM Approval	FM Approved Class 4924 Product Type: Pipe and Duct insulation	Test Procedure Class Number 4924 UCB Standard No. 26-3
	UK Fire propagation Surface spread of flame Building Regulations	i1≤ 6.0 Class 1 Class 0	BS476: Part 6 BS476: Part 7 BS476 Parts 6 and 7
	USA, Canada	UL Approved Flame Class V-0 Flame Class V-0, HF-1 - thk. 3 mm	UL 94 UL 746 A - UL 746 B
	Shipyards (MED)	Meets test requirements	IMO Res. MSC.307(88); IMO MSC/Circ. 1004 (Directive MED 2014/90/UE Modules B and D)
	Swiss Reaction to Fire group	Tubes: RF2 Sheets: RF2 (cr)	VKF Directive 13-15
ANTIMICROBIAL BEHAVIOUR	No fungal and bacterial growth detected		A.A.T.C.C. Test Method 30 ISO 22196
CORROSION RISK	Meets test requirements		EN 13468

The materials used within the EUROBATEX range do not have dangerous characteristics, as required by current legislation.

The life expectancy of Eurobatex products depends on the conditions of the environment in which the product is used. If correctly installed and with the right thickness and method of installation, the product maintains its insulating properties unaltered, without any significant deterioration, for over 50 years.



The production process of EUROBATEX is divided into the following steps:

- Raw materials check in: verification and storage
- Controls according to the raw material internal inwards control plan and issue of the quality pass
- First phase preparation (masterbatch; semi-finished product)) with mixing of inert raw materials by means of a mixer
- Air cooling of the masterbatch
- Masterbatch storage and quality control of 100% of the first phase production
- Second phase preparation (compound; semi-finished product) with mixing of the reactive raw materials by means of a mixer
- Air cooling of the compound
- 100% quality control of second phase production
- Feeding of an extruder with the compound
- The material coming out of the extruder, compact and already formed, is placed in a horizontal oven where the vulcanization (for mechanical properties) and expansion (with formation of the closed cell material that gives the insulating properties to the final product) processes will take place
- Exit of the vulcanized and expanded product from the oven
- Air cooling
- Possible application of the adhesive on the sheet by means of a pressure calender
- Printing, cutting and packaging

With a view to environmental sustainability, Eurobatex, if correctly removed, is part of the production process of the Eurobatex OC sound-absorbing material as raw material.

METHODOLOGY

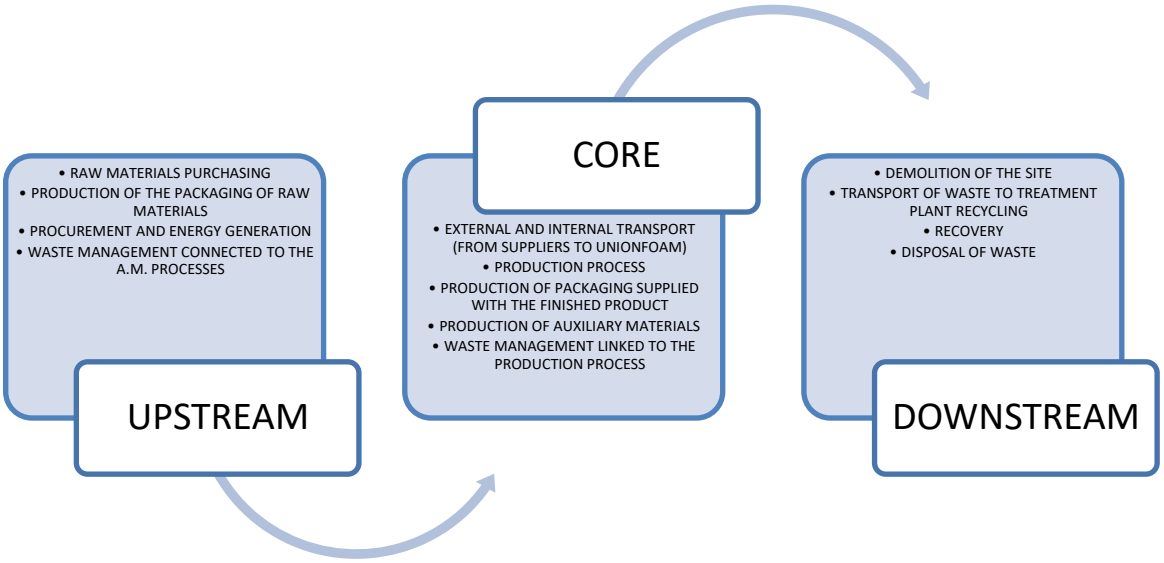
The methodological approach follows the guideline of Life Cycle Assessment (LCA), that addresses the environmental issues through the life cycle of a product. The LCA is an international, standardised and comprehensive methodology that evaluates "the environmental aspects and potential environmental impacts (e.g. use of resources and the environmental consequences of releases) throughout a product's life cycle from raw material acquisition through production, use, end-of-life treatment, recycling until final disposal (i.e. cradle-to-grave)" [ISO 14040:2006] and [14044:2008].

Scope

The products under evaluation are the both tubes and sheets of EUROBATEX, with the main application in the construction sector. For this reason the calculation rules are referred to the general construction products using as reference document the calculation rules defined by the construction category rules (PCR). The PCR in question therefore requires an analysis of the life cycle through an approach called "from cradle to gate", taking into consideration the extraction and supply phases of raw materials and energy used.
This EPD includes the production phases (modules A1-A3), end of life (modules C1-C4) and benefits and loads beyond the system boundaries (module D).

Production stage			**Construction process stage**		**Use stage**							**End of Life stage**				**Benefits and loads beyond the system boundaries**
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse- Recovery- Recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	**X**	**X**	**MND**	**MND**	**MND**	**MND**	**MND**	**MND**	**MND**	**MND**	**MND**	**X**	**X**	**X**	**X**	**X**

X: module taken into consideration; MND: module not declared



Type of EPD	From cradle to gate with module C and module D
Geographic validity	The environmental issue are calculated for the production plants of UNION FOAM in Italy. The reference market is global.
Time validity	2021
Database:	Ecoinvent 3.8
Software:	SimaPro 9.3.0.3

Declared unit

The study was carried out using 1 m^3 of rubber foam as reference unit. This choice allows to include the entire range of products of the EUROBATEX line, in all different thicknesses, in both tube and sheet versions.

Assumptions

The data refer to all the activities that contribute to the production of the EUROBATEX product range All data regarding raw materials, energy consumption, consumption of auxiliary materials, sourced in the production site, were recalculated considering exclusively the production of the EUROBATEX brand. In addition, the mass balance was calculated starting from the composition of the product before the final extrusion phase.

Cut-off criteria

All data were collected according to the PCR standard. Due to the complexity of the product and of its life cycle, some assumptions were made which led to the cut-off of some contributions.

Actually, the elements of the life cycle excluded from the study are: the packaging of the auxiliary material, the transport of workers, the adhesive tape used to close the packaging of the products , the adhesive used in some types of pipes (for the sheets this component was considered).

Data Quality

The data collected for the mass balance and the production process are site-specific, in particular, information regarding weight, quantity, energy consumption, raw materials, transport and waste has been collected directly from the company. All the other information relating to the production and supply of materials and energy, the type of transport and the treatment of waste were taken from the Ecoinvent 3.5 database.

The quality of the electricity and thermal energy data takes into consideration that the company is supplied through the national energy network, and therefore the Italian "Energy mix" is adopted as per Ecoinvent database.

With regard to statistical data, criteria were applied throughout the analysis:

- Geographical equivalence: Italian, European or possibly global systems have been analysed for raw materials, purchased from global suppliers;
- Technological equivalence: comparable technological systems were analysed through literature searches;
- Equivalence with respect to system boundaries: systems taking into account similar inputs and outputs and similar phases were considered.



Proxy data had to be used for some items of the mass balance for which it was not possible to model raw material accurately with the Ecoinvent database. Proxy data anyway were used for a value of less than 0,32% of the mass balance.

Allocation

The allocation was made considering on the basis of the quantities produced respectively in Phase 1 and Phase 2 of the production process. The aspects common to both Phases have been allocated to the quantities relating to Phase 2.

REFERENCE SCENARIO

As reported in the PCR reference document, the raw material procurement (UPSTREAM), transport and internal production (CORE PROCESS) phases were considered, omitting the distribution, use and disposal phases (DOWNSTREAM).

For the upstream phases, all impacts due to the production and supply of raw materials were analysed (Module A1) and include:

- the extraction and processing of the raw materials contained in the expanded rubbers;
- the production of energy used;
- the production and energy supplied for the extraction and transformation of the raw material.

For the Core phase, modules A2 and A3 have been analysed and include:

- external and internal transport within the company
- the production of EUROBATEX
- the production of the packaging for the finished products
- the production of the auxiliary materials necessary to obtain the finished products
- the management of waste related to the production process.

The Downstream phase includes modules C1, C2, C3 and C4, which include:

- demolition of the site
- transport of waste to the recovery / disposal site,
- recycling / recovery
- final landfill

RESULTS

The tables in the following pages summarize the total impacts of EUROBATEX.

The results of the impact assessment report relative information and are not able to predict future impacts on the final value of the category, the exceeding of any thresholds, safety margins or risks.

***LEGEND. GWP** = Global warming potential; **ODP** = Depletion potential of the stratospheric ozone layer; **AP** = Acidification potential of land and water; **EP** = Eutrophication potential; **POCP** = Formation potential of tropospheric ozone photochemical oxidants; **ADPE** = Abiotic depletion potential for non-fossil resources; **ADPF** = Abiotic depletion potential for fossil resources; **PERE** = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; **PERM** = Use of renewable primary energy resources used as raw materials; **PERT** = Total use of renewable primary energy resources; **PENRE** = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; **PENRM** = Use of non-renewable primary energy resources used as raw materials; **PENRT** = Total use of non- renewable primary energy resources; **SM** = Use of secondary material; **RSF** = Use of renewable secondary fuels; **NRSF** = Use of non-renewable secondary fuels; **FW** = Use of net fresh water; **HWD** = Hazardous waste disposed; **NHWD** = Non-hazardous waste disposed; **RWD** = Radioactive waste disposed; **CRU** = Components for re-use; **MFR** = Materials for recycling; **MER** = Materials for energy recovery; **EEE** = Exported electrical energy; **EET** = Exported thermal energy*

EUROBATEX sheets

ENVIRONMENTAL IMPACT PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
GWP	Kg CO2eq	2,00E+02	8,18E+00	2,66E+01	2,34E+02	0,00E+00	1,88E-01	0,00E+00	4,93E+00	5,12E+00	-7,34E-01
GWP-fossil	Kg CO2eq	1,96E+02	8,17E+00	3,46E+01	2,39E+02	0,00E+00	1,88E-01	0,00E+00	4,93E+00	5,11E+00	-7,18E-01
GWP-biogenic	Kg CO2eq	2,03E+00	5,62E-03	-8,15E+00	-6,12E+00	0,00E+00	1,72E-04	0,00E+00	3,18E-03	3,35E-03	-1,42E-02
GWP-land use	Kg CO2eq	1,49E+00	3,71E-03	5,95E-02	1,55E+00	0,00E+00	8,90E-05	0,00E+00	5,05E-04	5,94E-04	-1,09E-03
ODP	Kg CFC11 eq	4,47E-05	1,86E-06	1,80E-06	4,84E-05	0,00E+00	4,25E-08	0,00E+00	1,35E-07	1,78E-07	-3,80E-08
AP	Mol H+ eq.	1,55E+00	8,07E-02	7,02E-02	1,70E+00	0,00E+00	9,15E-04	0,00E+00	4,04E-03	4,95E-03	-4,72E-03
EP-freshwater	Kg PO4 eq.	2,44E-01	4,84E-04	4,79E-03	2,49E-01	0,00E+00	1,42E-05	0,00E+00	7,40E-05	8,82E-05	-5,32E-04
EP-marine	Kg N eq.	6,83E-01	2,32E-02	3,04E-02	7,36E-01	0,00E+00	3,04E-04	0,00E+00	8,99E-02	9,02E-02	-7,15E-04
EP-terrestrial	Mol N eq.	2,94E+00	2,56E-01	2,25E-01	3,42E+00	0,00E+00	3,33E-03	0,00E+00	1,46E-02	1,79E-02	-6,92E-03
POCP	Kg NMVOC eq.	7,73E-01	6,96E-02	5,60E-02	8,98E-01	0,00E+00	9,55E-04	0,00E+00	5,22E-03	6,18E-03	-1,65E-02
ADPF	MJ	3,51E+03	1,21E+02	2,05E+02	3,84E+03	0,00E+00	2,82E+00	0,00E+00	1,07E+01	1,36E+01	-1,21E+01
ADPE	Kg Sb eq.	1,85E+00	2,56E-05	6,06E-05	1,85E+00	0,00E+00	8,62E-07	0,00E+00	1,57E-06	2,43E-06	-1,13E-06
Water Use	m3 world eq deprived	1,61E+02	3,39E-01	1,90E+01	1,80E+02	0,00E+00	9,35E-03	0,00E+00	4,57E-01	4,67E-01	-1,31E-01

RESOURCE USE PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
PERE	MJ	2,74E+02	1,57E+00	1,65E+02	4,40E+02	0,00E+00	4,77E-02	0,00E+00	2,20E-01	2,68E-01	-2,18E+00
PERM	MJ	9,03E+01	0,00E+00	0,00E+00	9,03E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,64E+02	1,57E+00	1,65E+02	5,30E+02	0,00E+00	4,77E-02	0,00E+00	2,20E-01	2,68E-01	-2,18E+00
PENRE	MJ	3,41E+03	1,27E+02	5,58E+01	3,59E+03	0,00E+00	2,95E+00	0,00E+00	1,12E+01	1,41E+01	-1,06E+01
PENRM	MJ	1,76E+03	0,00E+00	0,00E+00	1,76E+03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,77E+03	1,28E+02	2,21E+02	4,12E+03	0,00E+00	3,00E+00	0,00E+00	1,14E+01	1,44E+01	-1,27E+01
SM	Kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m3	4,22E+00	1,25E-02	4,92E-01	4,73E+00	0,00E+00	3,57E-04	0,00E+00	1,12E-02	1,15E-02	-1,01E-02

OUTPUT FLOWS AND WASTE CATEGORIES PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
HWD	kg	5,71E-03	2,85E-04	3,08E-04	6,31E-03	0,00E+00	7,57E-06	0,00E+00	1,63E-05	2,38E-05	-4,41E-06
NHWD	kg	2,99E+01	5,33E+00	7,01E+00	4,22E+01	0,00E+00	1,20E-01	0,00E+00	4,21E+01	4,22E+01	-4,00E-02
RWD	kg	9,22E-03	8,21E-04	7,55E-04	1,08E-02	0,00E+00	1,89E-05	0,00E+00	6,31E-05	8,20E-05	-7,73E-05
CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ADDITIONAL ENVIRONMENTAL IMPACTS PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
PM	disease inc.	1,18E-05	6,45E-07	9,59E-07	1,34E-05	0,00E+00	1,44E-08	0,00E+00	7,62E-08	9,06E-08	-3,10E-08
IRP	kBq U235 eq.	2,66E+01	6,10E-01	1,36E+00	2,86E+01	0,00E+00	1,50E-02	0,00E+00	5,24E-02	6,74E-02	-2,67E-01
ETP-fw	CTUe	4,67E+04	9,14E+01	2,23E+02	4,70E+04	0,00E+00	2,30E+00	0,00E+00	2,25E+01	2,48E+01	-1,15E+01
HTP-nc	CTUh	9,32E-06	9,12E-08	1,50E-07	9,56E-06	0,00E+00	2,33E-09	0,00E+00	9,52E-09	1,19E-08	-6,63E-09
HTP-c	CTUh	3,15E-07	3,46E-09	1,41E-08	3,32E-07	0,00E+00	8,42E-11	0,00E+00	3,60E-10	4,44E-10	-2,04E-10
SQP	Pt	9,19E+02	7,30E+01	8,47E+02	1,84E+03	0,00E+00	1,67E+00	0,00E+00	2,50E+01	2,66E+01	-3,68E+00

EUROBATEX self-adhesive sheets

ENVIRONMENTAL IMPACT PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
GWP	Kg CO2eq	2,00E+02	8,11E+00	2,60E+01	2,35E+02	0,00E+00	1,86E-01	0,00E+00	4,89E+00	5,07E+00	-7,27E-01
GWP-fossil	Kg CO2eq	1,97E+02	8,10E+00	3,31E+01	2,38E+02	0,00E+00	1,86E-01	0,00E+00	4,88E+00	5,07E+00	-7,12E-01
GWP-biogenic	Kg CO2eq	2,02E+00	5,57E-03	-7,14E+00	-5,11E+00	0,00E+00	1,70E-04	0,00E+00	3,15E-03	3,32E-03	-1,41E-02
GWP-land use	Kg CO2eq	1,47E+00	3,68E-03	4,49E-02	1,52E+00	0,00E+00	8,83E-05	0,00E+00	5,00E-04	5,88E-04	-1,08E-03
ODP	Kg CFC11 eq	4,44E-05	1,84E-06	1,51E-06	4,78E-05	0,00E+00	4,22E-08	0,00E+00	1,34E-07	1,76E-07	-3,77E-08
AP	Mol H+ eq.	1,54E+00	8,00E-02	6,23E-02	1,69E+00	0,00E+00	9,07E-04	0,00E+00	4,00E-03	4,91E-03	-4,68E-03
EP-freshwater	Kg P eq.	2,42E-01	4,80E-04	3,90E-03	2,46E-01	0,00E+00	1,41E-05	0,00E+00	7,34E-05	8,75E-05	-5,27E-04
EP-marine	Kg N eq.	6,79E-01	2,30E-02	2,46E-02	7,26E-01	0,00E+00	3,02E-04	0,00E+00	8,91E-02	8,94E-02	-7,09E-04
EP-terrestrial	Mol N eq.	2,93E+00	2,54E-01	1,93E-01	3,38E+00	0,00E+00	3,30E-03	0,00E+00	1,45E-02	1,78E-02	-6,86E-03
POCP	Kg NMVOC eq.	7,74E-01	6,90E-02	5,12E-02	8,94E-01	0,00E+00	9,47E-04	0,00E+00	5,18E-03	6,13E-03	-1,64E-02
ADPF	MJ	3,57E+03	1,20E+02	2,00E+02	3,89E+03	0,00E+00	2,80E+00	0,00E+00	1,06E+01	1,34E+01	-1,20E+01
ADPE	Kg Sb eq.	1,83E+00	2,54E-05	5,41E-05	1,83E+00	0,00E+00	8,55E-07	0,00E+00	1,55E-06	2,41E-06	-1,12E-06
Water Use	m3 world eq deprived	1,61E+02	3,36E-01	1,88E+01	1,80E+02	0,00E+00	9,27E-03	0,00E+00	4,53E-01	4,63E-01	-1,30E-01

RESOURCE USE PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
PERE	MJ	2,73E+02	1,56E+00	1,41E+02	4,15E+02	0,00E+00	4,73E-02	0,00E+00	2,18E-01	2,66E-01	-2,16E+00
PERM	MJ	9,02E+01	0,00E+00	0,00E+00	9,02E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,63E+02	1,56E+00	1,41E+02	5,05E+02	0,00E+00	4,73E-02	0,00E+00	2,18E-01	2,66E-01	-2,16E+00
PENRE	MJ	3,46E+03	1,26E+02	7,45E+01	3,66E+03	0,00E+00	2,93E+00	0,00E+00	1,11E+01	1,40E+01	-1,05E+01
PENRM	MJ	1,75E+03	0,00E+00	0,00E+00	1,75E+03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,83E+03	1,27E+02	2,15E+02	4,17E+03	0,00E+00	2,97E+00	0,00E+00	1,13E+01	1,43E+01	-1,26E+01
SM	Kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m3	4,22E+00	1,24E-02	4,74E-01	4,70E+00	0,00E+00	3,54E-04	0,00E+00	1,11E-02	1,14E-02	-1,00E-02

OUTPUT FLOWS AND WASTE CATEGORIES PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
HWD	kg	5,68E-03	2,83E-04	2,62E-04	6,22E-03	0,00E+00	7,50E-06	0,00E+00	1,61E-05	2,36E-05	-4,37E-06
NHWD	kg	2,97E+01	5,28E+00	6,51E+00	4,15E+01	0,00E+00	1,19E-01	0,00E+00	4,18E+01	4,19E+01	-3,97E-02
RWD	kg	9,19E-03	8,14E-04	6,53E-04	1,07E-02	0,00E+00	1,88E-05	0,00E+00	6,25E-05	8,13E-05	-7,66E-05
CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ADDITIONAL ENVIRONMENTAL IMPACTS PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
PM	disease inc.	1,18E-05	6,39E-07	8,05E-07	1,32E-05	0,00E+00	1,43E-08	0,00E+00	7,56E-08	8,99E-08	-3,07E-08
IRP	kBq U235 eq.	2,66E+01	6,05E-01	1,14E+00	2,83E+01	0,00E+00	1,49E-02	0,00E+00	5,19E-02	6,68E-02	-2,65E-01
ETP-fw	CTUe	4,63E+04	9,06E+01	1,91E+02	4,66E+04	0,00E+00	2,28E+00	0,00E+00	2,23E+01	2,46E+01	-1,14E+01
HTP-nc	CTUh	9,26E-06	9,04E-08	1,29E-07	9,48E-06	0,00E+00	2,31E-09	0,00E+00	9,44E-09	1,17E-08	-6,58E-09
HTP-c	CTUh	3,13E-07	3,43E-09	1,30E-08	3,29E-07	0,00E+00	8,35E-11	0,00E+00	3,57E-10	4,40E-10	-2,02E-10
SQP	Pt	9,14E+02	7,24E+01	7,28E+02	1,71E+03	0,00E+00	1,65E+00	0,00E+00	2,47E+01	2,64E+01	-3,65E+00

EUROBATEX pipes self-adhesive on one side

ENVIRONMENTAL IMPACT PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
GWP	Kg CO2eq	2,53E+02	1,04E+01	3,82E+01	3,02E+02	0,00E+00	2,39E-01	0,00E+00	6,26E+00	6,50E+00	-9,32E-01
GWP-fossil	Kg CO2eq	2,49E+02	1,04E+01	5,17E+01	3,11E+02	0,00E+00	2,38E-01	0,00E+00	6,26E+00	6,49E+00	-9,12E-01
GWP-biogenic	Kg CO2eq	2,58E+00	7,13E-03	-1,37E+01	-1,11E+01	0,00E+00	2,18E-04	0,00E+00	4,04E-03	4,26E-03	-1,81E-02
GWP-land use	Kg CO2eq	1,89E+00	4,72E-03	1,26E-01	2,02E+00	0,00E+00	1,13E-04	0,00E+00	6,41E-04	7,54E-04	-1,39E-03
ODP	Kg CFC11 eq	5,68E-05	2,36E-06	3,27E-06	6,24E-05	0,00E+00	5,40E-08	0,00E+00	1,72E-07	2,26E-07	-4,82E-08
AP	Mol H+ eq.	1,97E+00	1,03E-01	1,30E-01	2,20E+00	0,00E+00	1,16E-03	0,00E+00	5,13E-03	6,29E-03	-6,00E-03
EP-freshwater	Kg P eq.	3,09E-01	6,15E-04	9,79E-03	3,20E-01	0,00E+00	1,80E-05	0,00E+00	9,40E-05	1,12E-04	-6,76E-04
EP-marine	Kg N eq.	8,67E-01	2,95E-02	6,01E-02	9,57E-01	0,00E+00	3,87E-04	0,00E+00	1,14E-01	1,15E-01	-9,08E-04
EP-terrestrial	Mol N eq.	3,73E+00	3,25E-01	4,19E-01	4,47E+00	0,00E+00	4,23E-03	0,00E+00	1,85E-02	2,28E-02	-8,78E-03
POCP	Kg NMVOC eq.	9,81E-01	8,84E-02	1,01E-01	1,17E+00	0,00E+00	1,21E-03	0,00E+00	6,63E-03	7,85E-03	-2,10E-02
ADPF	MJ	4,46E+03	1,54E+02	3,72E+02	4,99E+03	0,00E+00	3,59E+00	0,00E+00	1,36E+01	1,72E+01	-1,54E+01
ADPE	Kg Sb eq.	2,35E+00	3,25E-05	1,15E-04	2,35E+00	0,00E+00	1,09E-06	0,00E+00	1,99E-06	3,08E-06	-1,44E-06
Water Use	m3 world eq deprived	2,04E+02	4,31E-01	2,70E+01	2,32E+02	0,00E+00	1,19E-02	0,00E+00	5,81E-01	5,93E-01	-1,67E-01

RESOURCE USE PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
PERE	MJ	3,48E+02	2,00E+00	2,92E+02	6,42E+02	0,00E+00	6,06E-02	0,00E+00	2,80E-01	3,40E-01	-2,76E+00
PERM	MJ	1,15E+02	0,00E+00	0,00E+00	1,15E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	4,62E+02	2,00E+00	2,92E+02	7,56E+02	0,00E+00	6,06E-02	0,00E+00	2,80E-01	3,40E-01	-2,76E+00
PENRE	MJ	4,33E+03	1,61E+02	1,07E+02	4,59E+03	0,00E+00	3,75E+00	0,00E+00	1,42E+01	1,80E+01	-1,34E+01
PENRM	MJ	2,24E+03	0,00E+00	0,00E+00	2,24E+03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	4,79E+03	1,63E+02	4,00E+02	5,35E+03	0,00E+00	3,81E+00	0,00E+00	1,45E+01	1,83E+01	-1,62E+01
SM	Kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m3	5,37E+00	1,59E-02	7,31E-01	6,11E+00	0,00E+00	4,53E-04	0,00E+00	1,42E-02	1,47E-02	-1,28E-02

OUTPUT FLOWS AND WASTE CATEGORIES PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
HWD	kg	7,26E-03	3,62E-04	5,53E-04	8,17E-03	0,00E+00	9,61E-06	0,00E+00	2,07E-05	3,03E-05	-5,60E-06
NHWD	kg	3,79E+01	6,77E+00	1,07E+01	5,54E+01	0,00E+00	1,52E-01	0,00E+00	5,35E+01	5,37E+01	-5,08E-02
RWD	kg	1,17E-02	1,04E-03	1,34E-03	1,41E-02	0,00E+00	2,40E-05	0,00E+00	8,01E-05	1,04E-04	-9,81E-05
CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ADDITIONAL ENVIRONMENTAL IMPACTS PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
PM	disease inc.	1,49E-05	8,19E-07	1,86E-06	1,76E-05	0,00E+00	1,83E-08	0,00E+00	9,68E-08	1,15E-07	-3,94E-08
IRP	kBq U235 eq.	3,38E+01	7,75E-01	2,63E+00	3,72E+01	0,00E+00	1,91E-02	0,00E+00	6,65E-02	8,55E-02	-3,40E-01
ETP-fw	CTUe	5,93E+04	1,16E+02	4,31E+02	5,98E+04	0,00E+00	2,93E+00	0,00E+00	2,85E+01	3,15E+01	-1,46E+01
HTP-nc	CTUh	1,18E-05	1,16E-07	2,86E-07	1,22E-05	0,00E+00	2,96E-09	0,00E+00	1,21E-08	1,51E-08	-8,43E-09
HTP-c	CTUh	4,00E-07	4,39E-09	2,30E-08	4,27E-07	0,00E+00	1,07E-10	0,00E+00	4,57E-10	5,64E-10	-2,59E-10
SQP	Pt	1,17E+03	9,27E+01	1,48E+03	2,74E+03	0,00E+00	2,12E+00	0,00E+00	3,17E+01	3,38E+01	-4,68E+00

EUROBATEX pipes self-adhesive on both sides

ENVIRONMENTAL IMPACT PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
GWP	Kg CO2eq	2,27E+02	9,31E+00	3,44E+01	2,71E+02	0,00E+00	2,14E-01	0,00E+00	5,61E+00	5,83E+00	-8,36E-01
GWP-fossil	Kg CO2eq	2,23E+02	9,30E+00	4,68E+01	2,79E+02	0,00E+00	2,14E-01	0,00E+00	5,61E+00	5,82E+00	-8,18E-01
GWP-biogenic	Kg CO2eq	2,31E+00	6,40E-03	-1,27E+01	-1,04E+01	0,00E+00	1,96E-04	0,00E+00	3,62E-03	3,82E-03	-1,62E-02
GWP-land use	Kg CO2eq	1,69E+00	4,23E-03	1,16E-01	1,81E+00	0,00E+00	1,01E-04	0,00E+00	5,75E-04	6,76E-04	-1,24E-03
ODP	Kg CFC11 eq	5,09E-05	2,11E-06	3,00E-06	5,60E-05	0,00E+00	4,85E-08	0,00E+00	1,54E-07	2,03E-07	-4,33E-08
AP	Mol H+ eq.	1,76E+00	9,19E-02	1,19E-01	1,97E+00	0,00E+00	1,04E-03	0,00E+00	4,60E-03	5,64E-03	-5,38E-03
EP-freshwater	Kg P eq.	2,77E-01	5,52E-04	9,03E-03	2,87E-01	0,00E+00	1,62E-05	0,00E+00	8,43E-05	1,01E-04	-6,06E-04
EP-marine	Kg N eq.	7,78E-01	2,64E-02	5,54E-02	8,60E-01	0,00E+00	3,47E-04	0,00E+00	1,02E-01	1,03E-01	-8,15E-04
EP-terrestrial	Mol N eq.	3,34E+00	2,91E-01	3,85E-01	4,02E+00	0,00E+00	3,79E-03	0,00E+00	1,66E-02	2,04E-02	-7,88E-03
POCP	Kg NMVOC eq.	8,80E-01	7,93E-02	9,23E-02	1,05E+00	0,00E+00	1,09E-03	0,00E+00	5,95E-03	7,04E-03	-1,88E-02
ADPF	MJ	4,00E+03	1,38E+02	3,41E+02	4,48E+03	0,00E+00	3,22E+00	0,00E+00	1,22E+01	1,55E+01	-1,38E+01
ADPE	Kg Sb eq.	2,11E+00	2,91E-05	1,06E-04	2,11E+00	0,00E+00	9,82E-07	0,00E+00	1,78E-06	2,76E-06	-1,29E-06
Water Use	m3 world eq deprived	1,83E+02	3,86E-01	2,44E+01	2,08E+02	0,00E+00	1,06E-02	0,00E+00	5,21E-01	5,31E-01	-1,49E-01

RESOURCE USE PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
PERE	MJ	3,12E+02	1,79E+00	2,70E+02	5,83E+02	0,00E+00	5,43E-02	0,00E+00	2,51E-01	3,05E-01	-2,48E+00
PERM	MJ	1,03E+02	0,00E+00	0,00E+00	1,03E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	4,15E+02	1,79E+00	2,70E+02	6,86E+02	0,00E+00	5,43E-02	0,00E+00	2,51E-01	3,05E-01	-2,48E+00
PENRE	MJ	3,88E+03	1,45E+02	9,64E+01	4,12E+03	0,00E+00	3,36E+00	0,00E+00	1,28E+01	1,61E+01	-1,20E+01
PENRM	MJ	2,01E+03	0,00E+00	0,00E+00	2,01E+03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	4,29E+03	1,46E+02	3,66E+02	4,81E+03	0,00E+00	3,42E+00	0,00E+00	1,30E+01	1,64E+01	-1,45E+01
SM	Kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m3	4,81E+00	1,43E-02	6,63E-01	5,49E+00	0,00E+00	4,07E-04	0,00E+00	1,27E-02	1,32E-02	-1,15E-02

OUTPUT FLOWS AND WASTE CATEGORIES PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
HWD	kg	6,51E-03	3,25E-04	5,07E-04	7,34E-03	0,00E+00	8,62E-06	0,00E+00	1,85E-05	2,71E-05	-5,02E-06
NHWD	kg	3,40E+01	6,07E+00	9,69E+00	4,98E+01	0,00E+00	1,36E-01	0,00E+00	4,80E+01	4,81E+01	-4,56E-02
RWD	kg	1,05E-02	9,36E-04	1,23E-03	1,27E-02	0,00E+00	2,16E-05	0,00E+00	7,18E-05	9,34E-05	-8,80E-05
CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ADDITIONAL ENVIRONMENTAL IMPACTS PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
PM	disease inc.	1,34E-05	7,34E-07	1,71E-06	1,58E-05	0,00E+00	1,64E-08	0,00E+00	8,68E-08	1,03E-07	-3,53E-08
IRP	kBq U235 eq.	3,03E+01	6,95E-01	2,42E+00	3,34E+01	0,00E+00	1,71E-02	0,00E+00	5,96E-02	7,67E-02	-3,05E-01
ETP-fw	CTUe	5,32E+04	1,04E+02	3,97E+02	5,37E+04	0,00E+00	2,62E+00	0,00E+00	2,56E+01	2,82E+01	-1,30E+01
HTP-nc	CTUh	1,06E-05	1,04E-07	2,64E-07	1,10E-05	0,00E+00	2,65E-09	0,00E+00	1,08E-08	1,35E-08	-7,56E-09
HTP-c	CTUh	3,58E-07	3,94E-09	2,12E-08	3,84E-07	0,00E+00	9,59E-11	0,00E+00	4,10E-10	5,06E-10	-2,32E-10
SQP	Pt	1,05E+03	8,32E+01	1,36E+03	2,49E+03	0,00E+00	1,90E+00	0,00E+00	2,84E+01	3,03E+01	-4,20E+00

EUROBATEX pipes self-adhesive on both sides + overlap in foam with adhesive

ENVIRONMENTAL IMPACT PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
GWP	Kg CO2eq	2,27E+02	9,28E+00	3,53E+01	2,71E+02	0,00E+00	2,13E-01	0,00E+00	5,60E+00	5,81E+00	-8,33E-01
GWP-fossil	Kg CO2eq	2,22E+02	9,27E+00	4,95E+01	2,81E+02	0,00E+00	2,13E-01	0,00E+00	5,59E+00	5,80E+00	-8,15E-01
GWP-biogenic	Kg CO2eq	2,30E+00	6,38E-03	-1,45E+01	-1,22E+01	0,00E+00	1,95E-04	0,00E+00	3,61E-03	3,81E-03	-1,61E-02
GWP-land use	Kg CO2eq	1,69E+00	4,22E-03	1,33E-01	1,82E+00	0,00E+00	1,01E-04	0,00E+00	5,73E-04	6,74E-04	-1,24E-03
ODP	Kg CFC11 eq	5,07E-05	2,11E-06	3,34E-06	5,62E-05	0,00E+00	4,83E-08	0,00E+00	1,54E-07	2,02E-07	-4,31E-08
AP	Mol H+ eq.	1,76E+00	9,16E-02	1,34E-01	1,98E+00	0,00E+00	1,04E-03	0,00E+00	4,58E-03	5,62E-03	-5,36E-03
EP-freshwater	Kg P eq.	2,77E-01	5,50E-04	1,03E-02	2,87E-01	0,00E+00	1,61E-05	0,00E+00	8,40E-05	1,00E-04	-6,04E-04
EP-marine	Kg N eq.	7,75E-01	2,63E-02	6,25E-02	8,64E-01	0,00E+00	3,46E-04	0,00E+00	1,02E-01	1,02E-01	-8,12E-04
EP-terrestrial	Mol N eq.	3,33E+00	2,90E-01	4,31E-01	4,06E+00	0,00E+00	3,78E-03	0,00E+00	1,66E-02	2,03E-02	-7,85E-03
POCP	Kg NMVOC eq.	8,77E-01	7,90E-02	1,03E-01	1,06E+00	0,00E+00	1,08E-03	0,00E+00	5,93E-03	7,01E-03	-1,87E-02
ADPF	MJ	3,99E+03	1,37E+02	3,83E+02	4,51E+03	0,00E+00	3,21E+00	0,00E+00	1,22E+01	1,54E+01	-1,38E+01
ADPE	Kg Sb eq.	2,10E+00	2,90E-05	1,20E-04	2,10E+00	0,00E+00	9,79E-07	0,00E+00	1,78E-06	2,76E-06	-1,28E-06
Water Use	m3 world eq deprived	1,82E+02	3,85E-01	2,55E+01	2,08E+02	0,00E+00	1,06E-02	0,00E+00	5,19E-01	5,30E-01	-1,49E-01

RESOURCE USE PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
PERE	MJ	3,11E+02	1,78E+00	3,09E+02	6,21E+02	0,00E+00	5,41E-02	0,00E+00	2,50E-01	3,04E-01	-2,47E+00
PERM	MJ	1,03E+02	0,00E+00	0,00E+00	1,03E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	4,13E+02	1,78E+00	3,09E+02	7,24E+02	0,00E+00	5,41E-02	0,00E+00	2,50E-01	3,04E-01	-2,47E+00
PENRE	MJ	3,87E+03	1,44E+02	1,03E+02	4,11E+03	0,00E+00	3,35E+00	0,00E+00	1,27E+01	1,61E+01	-1,20E+01
PENRM	MJ	2,00E+03	0,00E+00	0,00E+00	2,00E+03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	4,28E+03	1,46E+02	4,12E+02	4,84E+03	0,00E+00	3,40E+00	0,00E+00	1,30E+01	1,64E+01	-1,45E+01
SM	Kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m3	4,80E+00	1,42E-02	7,02E-01	5,51E+00	0,00E+00	4,05E-04	0,00E+00	1,27E-02	1,31E-02	-1,15E-02

OUTPUT FLOWS AND WASTE CATEGORIES PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
HWD	kg	6,49E-03	3,24E-04	5,64E-04	7,37E-03	0,00E+00	8,59E-06	0,00E+00	1,85E-05	2,71E-05	-5,00E-06
NHWD	kg	3,39E+01	6,05E+00	1,03E+01	5,02E+01	0,00E+00	1,36E-01	0,00E+00	4,78E+01	4,80E+01	-4,54E-02
RWD	kg	1,05E-02	9,33E-04	1,37E-03	1,28E-02	0,00E+00	2,15E-05	0,00E+00	7,16E-05	9,31E-05	-8,77E-05
CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ADDITIONAL ENVIRONMENTAL IMPACTS PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
PM	disease inc.	1,34E-05	7,32E-07	1,94E-06	1,60E-05	0,00E+00	1,64E-08	0,00E+00	8,65E-08	1,03E-07	-3,52E-08
IRP	kBq U235 eq.	3,02E+01	6,93E-01	2,73E+00	3,37E+01	0,00E+00	1,70E-02	0,00E+00	5,94E-02	7,65E-02	-3,04E-01
ETP-fw	CTUe	5,30E+04	1,04E+02	4,49E+02	5,35E+04	0,00E+00	2,62E+00	0,00E+00	2,55E+01	2,81E+01	-1,30E+01
HTP-nc	CTUh	1,06E-05	1,04E-07	2,99E-07	1,10E-05	0,00E+00	2,64E-09	0,00E+00	1,08E-08	1,35E-08	-7,53E-09
HTP-c	CTUh	3,57E-07	3,92E-09	2,38E-08	3,85E-07	0,00E+00	9,56E-11	0,00E+00	4,09E-10	5,04E-10	-2,32E-10
SQP	Pt	1,04E+03	8,29E+01	1,56E+03	2,68E+03	0,00E+00	1,89E+00	0,00E+00	2,83E+01	3,02E+01	-4,18E+00

EUROBATEX pipes in 2 meters length or coils

ENVIRONMENTAL IMPACT PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
GWP	Kg CO2eq	2,31E+02	9,48E+00	3,49E+01	2,76E+02	0,00E+00	2,18E-01	0,00E+00	5,71E+00	5,93E+00	-8,50E-01
GWP-fossil	Kg CO2eq	2,27E+02	9,47E+00	4,78E+01	2,84E+02	0,00E+00	2,17E-01	0,00E+00	5,71E+00	5,93E+00	-8,32E-01
GWP-biogenic	Kg CO2eq	2,35E+00	6,51E-03	-1,31E+01	-1,07E+01	0,00E+00	1,99E-04	0,00E+00	3,69E-03	3,89E-03	-1,65E-02
GWP-land use	Kg CO2eq	1,72E+00	4,30E-03	1,18E-01	1,84E+00	0,00E+00	1,03E-04	0,00E+00	5,85E-04	6,88E-04	-1,27E-03
ODP	Kg CFC11 eq	5,18E-05	2,15E-06	3,06E-06	5,70E-05	0,00E+00	4,93E-08	0,00E+00	1,57E-07	2,06E-07	-4,40E-08
AP	Mol H+ eq.	1,79E+00	9,35E-02	1,22E-01	2,01E+00	0,00E+00	1,06E-03	0,00E+00	4,68E-03	5,74E-03	-5,47E-03
EP-freshwater	Kg P eq.	2,82E-01	5,61E-04	9,22E-03	2,92E-01	0,00E+00	1,65E-05	0,00E+00	8,58E-05	1,02E-04	-6,17E-04
EP-marine	Kg N eq.	7,91E-01	2,69E-02	5,65E-02	8,75E-01	0,00E+00	3,53E-04	0,00E+00	1,04E-01	1,05E-01	-8,29E-04
EP-terrestrial	Mol N eq.	3,40E+00	2,96E-01	3,93E-01	4,09E+00	0,00E+00	3,86E-03	0,00E+00	1,69E-02	2,08E-02	-8,01E-03
POCP	Kg NMVOC eq.	8,95E-01	8,07E-02	9,44E-02	1,07E+00	0,00E+00	1,11E-03	0,00E+00	6,05E-03	7,16E-03	-1,91E-02
ADPF	MJ	4,07E+03	1,40E+02	3,48E+02	4,56E+03	0,00E+00	3,27E+00	0,00E+00	1,24E+01	1,57E+01	-1,40E+01
ADPE	Kg Sb eq.	2,14E+00	2,96E-05	1,09E-04	2,14E+00	0,00E+00	9,99E-07	0,00E+00	1,81E-06	2,81E-06	-1,31E-06
Water Use	m3 world eq deprived	1,86E+02	3,93E-01	2,49E+01	2,12E+02	0,00E+00	1,08E-02	0,00E+00	5,30E-01	5,41E-01	-1,52E-01

RESOURCE USE PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
PERE	MJ	3,17E+02	1,82E+00	2,78E+02	5,97E+02	0,00E+00	5,53E-02	0,00E+00	2,55E-01	3,11E-01	-2,52E+00
PERM	MJ	1,05E+02	0,00E+00	0,00E+00	1,05E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	4,22E+02	1,82E+00	2,78E+02	7,01E+02	0,00E+00	5,53E-02	0,00E+00	2,55E-01	3,11E-01	-2,52E+00
PENRE	MJ	3,95E+03	1,47E+02	9,71E+01	4,19E+03	0,00E+00	3,42E+00	0,00E+00	1,30E+01	1,64E+01	-1,22E+01
PENRM	MJ	2,05E+03	0,00E+00	0,00E+00	2,05E+03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	4,37E+03	1,49E+02	3,75E+02	4,89E+03	0,00E+00	3,48E+00	0,00E+00	1,32E+01	1,67E+01	-1,48E+01
SM	Kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m3	4,90E+00	1,45E-02	6,76E-01	5,59E+00	0,00E+00	4,14E-04	0,00E+00	1,30E-02	1,34E-02	-1,17E-02

OUTPUT FLOWS AND WASTE CATEGORIES PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
HWD	kg	6,62E-03	3,31E-04	5,18E-04	7,47E-03	0,00E+00	8,77E-06	0,00E+00	1,89E-05	2,76E-05	-5,11E-06
NHWD	kg	3,46E+01	6,17E+00	9,88E+00	5,07E+01	0,00E+00	1,39E-01	0,00E+00	4,88E+01	4,90E+01	-4,64E-02
RWD	kg	1,07E-02	9,52E-04	1,26E-03	1,29E-02	0,00E+00	2,19E-05	0,00E+00	7,31E-05	9,50E-05	-8,95E-05
CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ADDITIONAL ENVIRONMENTAL IMPACTS PER DECLARED UNIT

Impact	UM	A1	A2	A3	A1-A3	C1	C2	C3	C4	C1-C4	D
PM	disease inc.	1,36E-05	7,47E-07	1,75E-06	1,61E-05	0,00E+00	1,67E-08	0,00E+00	8,83E-08	1,05E-07	-3,59E-08
IRP	kBq U235 eq.	3,09E+01	7,07E-01	2,47E+00	3,40E+01	0,00E+00	1,74E-02	0,00E+00	6,07E-02	7,81E-02	-3,10E-01
ETP-fw	CTUe	5,41E+04	1,06E+02	4,06E+02	5,46E+04	0,00E+00	2,67E+00	0,00E+00	2,60E+01	2,87E+01	-1,33E+01
HTP-nc	CTUh	1,08E-05	1,06E-07	2,70E-07	1,12E-05	0,00E+00	2,70E-09	0,00E+00	1,10E-08	1,37E-08	-7,69E-09
HTP-c	CTUh	3,65E-07	4,01E-09	2,18E-08	3,91E-07	0,00E+00	9,76E-11	0,00E+00	4,17E-10	5,15E-10	-2,36E-10
SQP	Pt	1,06E+03	8,46E+01	1,40E+03	2,55E+03	0,00E+00	1,93E+00	0,00E+00	2,89E+01	3,09E+01	-4,27E+00



Biogenic carbon	EUROBATEX flat sheets or rolls	EUROBATEX flat sheets or rolls with SELF-ADHESIVE backing	EUROBATEX pipe slit, SELF-ADHESIVE on one side (AD1)	EUROBATEX pipe slit SELF-ADHESIVE on both sides (AD2)	EUROBATEX pipe slit SELF-ADHESIVE (AD2) + rubber foam OVERLAP (ADG)	EUROBATEX in pipe sections or coils
Product [kg C]	**0,14**	**0,14**	**0,18**	**0,16**	**0,16**	**0,17**
Packaging [kg C]	**6,43**	**5,07**	**12,54**	**11,59**	**13,26**	**11,87**

REFERENCES

[1] UNI EN ISO 14040: 2006, Gestione ambientale – Valutazione del ciclo di vita – Principi e quadro di riferimento.

[2] UNI EN ISO 14044: 2006, Gestione ambientale – Valutazione del ciclo di vita – Requisiti e linee guida.

[3] UNI EN ISO 14025:2010, Etichette e dichiarazioni ambientali - Dichiarazioni ambientali di Tipo III - Principi e procedure

[4] UNI EN 15804:2012, Sostenibilità delle costruzioni – Dichiarazioni ambientali di prodotto – Regole chiave di sviluppo per categoria di prodotto.

[5] PCR ICMQ-001/15 rev 3 Prodotti da costruzione e servizi per costruzione, EPD Italy. Data di emissione: 02/12/2019.

[6] Regolamento EPDItaly rev. 5.2 del 16/02/2022

[7] Background report: Union Foam. Analisi del ciclo di vita di prodotti di isolamento termico EUROBATEX - Giugno 2022. Redatto da F. Gilardelli. Rev. 9 del 25/05/2023