Environmental Product Declaration (EPD)

of thermal insulation products

in accordance with ISO 14025:2006 and with EN15804:2012+A2:2019

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An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com

COMPANY INFORMATION

THE COMPANY

K-FLEX® is an Italian manufacturing company specialised in the production of thermal and acoustic flexible elastomeric insulation materials. K-FLEX® has production facilities and subsidiary networks around the globe in order to supply their products to a world-wide customer base. Its diversified products range provides solutions for various market sectors, including building, transportation, petrochemical and renewable energy. K-FLEX® is a worldwide market leader thanks to its focus on technological innovation and the quality of its products that play an essential role in energy consumption control and reduction of the greenhouse gas emission.

K-FLEX® is an example of a successful Italian company that has established itself worldwide. The company is present in 63 countries, with production facilities in all continents and more than 2500 employees. In addition, the company has commercial distribution branches, located all over the world, for the efficient and effective global distribution process of its products. The original manufacturing plant, located in Roncello (north of Milan), was founded in 1989 and today it is the largest in the world for the production of elastomeric insulation.

K-FLEX HISTORY

K-FLEX® was founded in 1989 in Roncello, located north of Milan, Italy, with the first production plant of elastomeric materials for thermal insulation. K-FLEX® quickly developed its presence in the market and grew rapidly. In 1993, K-FLEX® had already established a significant market share in Italy. It subsequently expanded into other European markets such as France and Spain, opening in Barcelona in 1995 and in Madrid in 1998. Almost ten years after its foundation, K-FLEX® began its expansion outside Europe starting up K-FLEX® China. Based in Guangzhou was the first of two manufacturing plants with a second plant built in Suzhou, which opened in 2009.The Company built further production facilities in the US, in Russia in 2005, in Malaysia, Poland, India and Dubai. In order to expand its commercial footprint, the Company opened distribution branches and various other distribution / sales companies in Germany (2000), Scandinavia (2005), United Kingdom (2006), Romania (2008), Japan (2008), Ukraine (2009), South Korea (2009). In the 2008 another strategic activity was the 100% share acquisition of BevEx Ltd. BevEx offers an important diversification opportunity for K-FLEX® through its presence in the Food & Beverage sector. At the end of 2009, K-FLEX® opened its headquarter in Roncello, housing a 50,000 sq. meter production facility. In the last few years K-FLEX® has been expanding the production facilities in Russia, Poland, India and USA in order to better answer to the local market request. In June 2014, the company changed its legal form from limited liability company (S.r.l.) to joint stock company (S.p.A.). In 2017, the plant in the USA was extended towards the biggest and most modern plant worldwide. Also the Polish plant was extended in 2017 and represents the biggest and most modern plant in Europe.In 2018, a new production site in Egypt was opened. In 2018, the new K-FLEX® logistics centre “K-FLEX®Logistikzentrum Leipzig-Halle” in Germany was opened. It is now the biggest distribution centre for elastomeric foams in whole

Europe. In 2019, a new production site in Vietnam has been opened in support of the Asian region market request. In the same year K-FLEX® implemented his Polish factory with a new polyethylene production plant. In 2020, a new production site in Mexico will be opened to support the growing of South American market

This declaration refers to products made in the Polish Uniejów plant.

PRODUCT INFORMATION

The insulation product is a material that, thanks to particular characteristics, prevents the transmission or diffusion of thermal, acoustic, electrical or other energy, depending on the application for which it is intended. The present LCA study refers to four thermal insulation products made by K-Flex, which are summarized and described below:

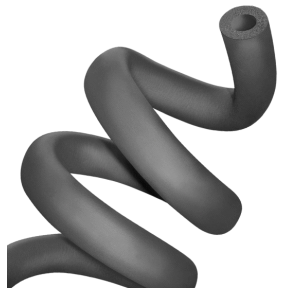
- K-FLEX® ST is suitable for all applications both civil and industrial that require the use of insulation material, without neglecting the price/quality relationship: refrigeration, air-conditioning, heating and plumbing, tanks, pipe fittings and water ducts;
- K-FLEX® EC is suitable for all applications both civil and industrial that require the use of insulation material;
- K-FLEX® ECO is a real “safe and and secure” answer to reducing energy consumption while at the same time protecting the environment. Elastomeric insulation material formulated and produced without using halogens. Thanks to its composition, any fumes given off during a fire are transparent and non-toxic to anyone in the vicinity. Approval and certification of product values are part of the company’s strategy aimed at optimizing and continuously improving basic requirements;
- K-FLEX® SOLAR the perfect solution for solar panels and industrial processes up to150°C. Revolutionary new packaging, tailor-made for the client, with practical and economical advantages for use and distribution.

The following tables show the technical characteristics of each type of product.

Characteristics of thermal insulation product K-FLEX ST

Property	*Value*		*Standard*	
Temperature range	K-FLEX ST TUBES: da -165°C a +110°C K-FLEX ST SHEETS: da -165°C* a +85°C		EN 14706 EN 14707	
Thermal conductivity λ W/(m*K)	Thickness ≤ 25mm -20 °C = 0,031 0 °C = 0,033 +20 °C = 0,035 +40 °C = 0,037	Thickness > 25mm -20 °C = 0,034 0 °C = 0,036 +20 °C = 0,038 +40 °C = 0,040	EN 13787 EN ISO 8497	
Corrosion problems	pH neutral (7±0,5)		EN 13468	
Permeability μ	≥ 10000	≥ 7000	EN 12086	
Fire	K-FLEX ST TUBES: Euroclass B_L - s2, d0 K-FLEX ST SHEETS: Euroclass B-s3, d0		EN 13501-1	

Characteristics of thermal insulation product K-FLEX EC

Property	*Value*		*Standard*	
Temperature range	K-FLEX EC: +110°C		EN 14706 EN 14707	
Thermal conductivity λ W/(m*K)	Thickness ≤25mm -20°C=0,031 0°C=0,033 +20°C=0,035 +40°C=0,037	Thickness >25mm -20°C=0,034 0°C=0,036 +20°C=0,038 +40°C=0,040	EN 13787 EN ISO 8497	
Corrosion problems	pH neutral (7±0,5)		EN 13468	
Permeability μ	≥7000		EN 12086	
Fire	Euroclass BL- s3, d0		EN 13501-1	

Characteristics of thermal insulation product K-FLEX ECO

Property	*Value*	*Standard*	
Temperature range	from -165 °C to +120 °C	EN 14706 EN 14707	
Thermal conductivity λ W/(m*K)	-20 °C = 0,036 0 °C = 0,038 +20 °C = 0,040 +40°C=0,042	EN 13787 EN 12667 EN ISO 8497	
Corrosion problems	pH neutral (7±0,5)	EN 13468	
Permeability μ	≥ 3000	EN 12086	
Fire	K-FLEX ECO TUBES: Euroclass D_L - s2, d0 K-FLEX ECO SHEETS: Euroclass E	EN 13501-1	
Ecological data	halogenfree - No PVC, No CFC e HCFC, No formaldehyde		
Ship approval	LR - DNV - M.M ITALIANA CE-MARINE (Bureau Veritas) - US NAVY		
Smoke classification (toxicity)	IMO RES 61(67)		
Smoke density (camera NBS)	≤ Dm 200		

Characteristics of thermal insulation product K-FLEX SOLAR

Property	*Value*	*Standard*	
Temperature range	from -40°C to +150° C	EN 14706 EN 14707	
Thermal conductivity λ W/(m*K)	0°C=0,040 40°C=0,044	EN 13787 EN12667 EN ISO 8497	
Corrosion problems	pH neutral (7±0,5)	EN 13468	
Fire	Euroclass E	EN 13501-1	

LCA INFORMATION

DECLARED UNIT

This life cycle analysis, defined as "from-cradle-to-gate with modules C and module D", takes into consideration the production phases of raw materials, their transportation to the production site, the manufacture and the end of life of the product, excluding the distribution and use phase. As regards the flows of matter and energy, declared unit is defined as:

1 m^3 of thermal insulation product, including packaging

The density considered for the products derives from an average of the production of the reference year (2018) and it is shown in the following table.

Density of thermal insulation products

Product	Density
K-FLEX ST	46,5 Kg/m^3
K-FLEX EC	48,5 Kg/m^3
K-FLEX ECO	74,5 Kg/m^3
K-FLEX SOLAR	84,0 Kg/m^3

SYSTEM BOUNDARIES

The system boundaries determine the process units to be included in the LCA study and which type of data "input" and / or "output" to the system can be omitted. In accordance with the PCR 2019:14 version 1.0 document and EN 15804, the life cycle of the acoustic insulation products made by K-Flex includes the extraction of raw materials and production cycle, transport and manufacturing, divided in the Upstream (A1), Core (A2 and A3) and End of Life (C) and Benefits and loads beyond the system boundary (D) phases. The construction process stage and the use stage (phases from A4 to B7 of PCR 2019:14) are not taken into account in this life cycle analysis.

	LIFE CYCLE INFORMATION															Supplementary information
	Product stage			Construction process stage		Use stage							End of life stage				Benefits and loads beyond the system boundary
	A1 – A3			A4 – A5		B1 – B5					B6 – B7		C1 – C4				D
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	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
Module declared	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	PL WORLD	EU WORLD	PL										PL	PL	PL	PL	PL
Specific data	>90%																
Variation – products	<10%																
Variation – sites	Not relevant																

ND: Module not declared

The **Upstream** (A1) phase includes raw material extraction and processing, and in particular:

- ✓ Extraction and processing of raw materials (e.g. mining processes);
- ✓ Generation of electricity, steam and heat from primary resources, also including their extraction, refining and transport;

The **Core** (A2-A3) phase includes following processes:

- ✓ Transportation up to the factory gate and internal transport (A2);
- ✓ Production of ancillary materials or pre-products (A3);
- ✓ Manufacturing of products and co-products (A3);
- ✓ Manufacturing of packaging (A3);
- ✓ Processing up to the end-of-waste state or disposal of final residues (A3).

The **End of life** (A2-A3) stage includes following processes:

- ✓ De-construction, demolition (C1);
- ✓ Transport to waste processing (C2);
- ✓ Waste processing for reuse, recovery and/or recycling (C3)
- ✓ Disposal (C4).

Module D includes reuse, recovery and/or recycling potentials, expressed as net impacts and benefits.

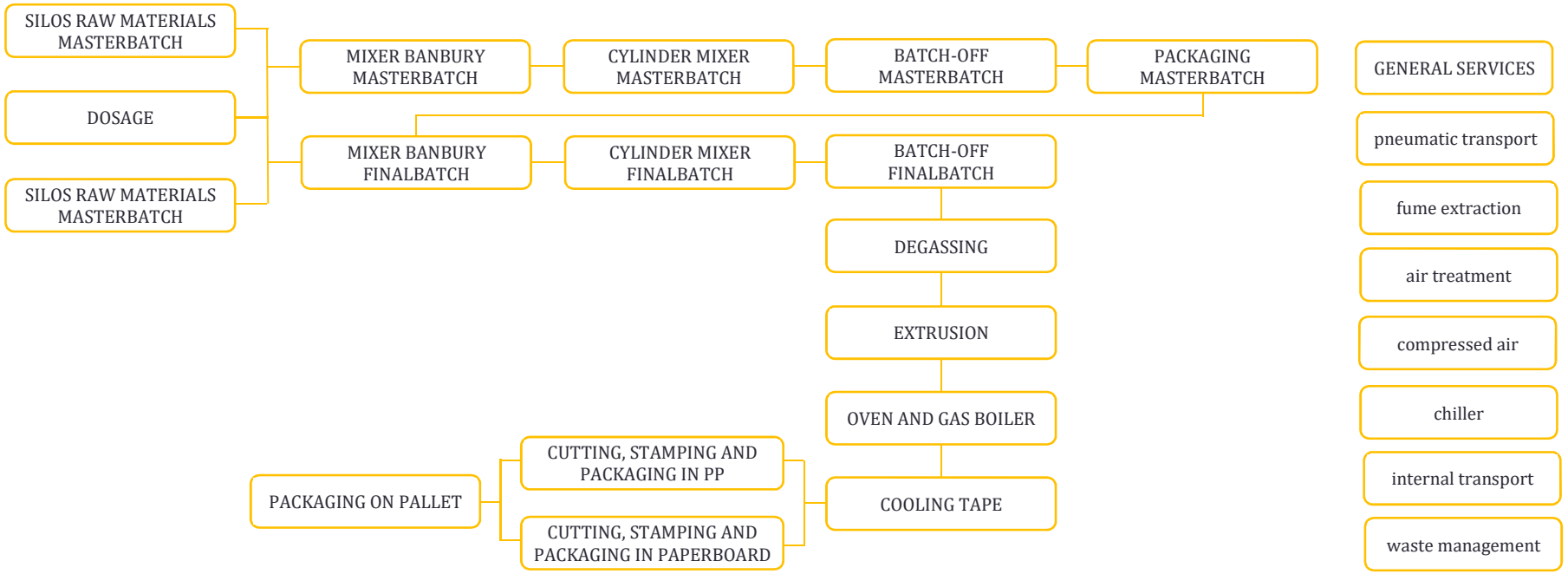
In the end of life stage, the K-Flex thermal insulation product is sent exclusively to landfill. As there are no possibilities to separate the insulation product from tanks, pipe fittings, water ducts etc., phase C1 (de-construction and demolition) is irrelevant; moreover, the product is only disposed, so phase C3 (waste treatment for reuse, recovery and / or recycling) is equal to zero. The result of phase D is also equal to zero, because there are no benefits deriving from the end of life (recycling, recovery and / or reuse).

PRODUCTION PROCESS

Weighting out raw materials from the warehouse according to the recipe for the actual production. Mixing weighted out all components in a mixer, and after in a roll mill to complete the mixing of the “Masterbatch”.

All raw materials are dosed into the mixer and mixed together with “Masterbatch”, and after in the ROLLMILL. Small samples are prepared for quality controls. After the cooling down, the Final batch is transported to the extruders area, where the material is extruded according to the shape and size needed. The extruded rubber pass directly into the oven for vulcanization and foaming process. Water bath is used to cool down the expanded rubber that is successively dried in a dedicated tunnel. The last step before packaging is the ink printing and cutting to required lengths. Small samples of finished products are constantly picked-up during the whole production.

SYSTEM DIAGRAM



DATA QUALITY AND CUT-OFF

Inventory analysis was conducted using specific data from K-Flex., relating to the year 2018 and to the production site of Uniejów. The data refer to the consumption of raw materials and electricity, the production of the thermal insulation products and the waste connected to it.

Selected generic data from international databases were used (Ecoinvent 3.5) regarding the production processes of raw materials and auxiliary materials used for the production, generation and distribution of electricity, means of transport and waste treatment processes related to the production that takes place in the plant. In addition, data on ground transportation distances were calculated using the Google Maps online calculator and those by sea using the Searates online tool.

The emissions of the upstream electricity used in manifacturing process and modelled as Poland electricity residual mix are 995 g CO_2eq/kWh (AIB 2018).

In accordance with the cut-off rule, packaging of raw material and ancillary were excluded from the assessment.

CONTENT INFORMATION

Content declaration of 1 m³ of thermal insulation products K-FLEX ST

Product	Product components	Weight, kg	%	Post-consumer material, weight-%	Renewable material, weight-%
K-FLEX ST	Polymers	10,0	21,6%	0%	0%
	Fillers	17,6	37,8%	0%	0%
	Plasticizer	9,3	20,1%	0%	0%
	Chemical additive (vulcanization agents)	5,3	11,3%	0%	0%
	Others	4,3	9,2%	0%	0%
	TOTAL	**46,5**	**100%**	**0%**	**0%**
	Packaging components	**Weight, kg**		**Weight-% (versus the product)**	
	Paperboard	7,8		16,8%	
	Pallet	4,6		9,9%	
	TOTAL	**12,4**		**26,7%**	

Content declaration of 1 m³ of thermal insulation products K-FLEX EC

Product	Product components	Weight, kg	%	Post-consumer material, weight-%	Renewable material, weight-%
K-FLEX EC	Polymers	10,5	21,6%	0%	0%
	Fillers	18,3	37,8%	0%	0%
	Plasticizer	9,7	20,1%	0%	0%
	Chemical additive (vulcanization agents)	5,5	11,3%	0%	0%
	Others	4,5	9,2%	0%	0%
	TOTAL	**48,5**	**100%**	**0%**	**0%**
	Packaging components	**Weight, kg**		**Weight-% (versus the product)**	
	Paperboard	10,8		22,3%	
	Pallet	6,4		13,2%	
	TOTAL	**17,2**		**35,5%**	

Content declaration of 1 m³ of thermal insulation products K-FLEX ECO

Product	Product components	Weight, kg	%	Post-consumer material, weight-%	Renewable material, weight-%
K-FLEX ECO	Polymers	18,7	25,1%	0%	0%
	fillers	28,2	37,8%	0%	0%
	Plasticizer	7,5	10%	0%	0%
	Chemical additive (vulcanization agents)	9,8	13,1%	0%	0%
	Others	10,4	14%	0%	0%
	TOTAL	**74,5**	**100%**	**0%**	**0%**
	Packaging components	**Weight, kg**		**Weight-% (versus the product)**	
	Paperboard	13,5		18,1%	
	Pallet	8,1		10,9%	
	TOTAL	**21,6**		**29,0%**	

Content declaration of 1 m³ of thermal insulation products K-FLEX SOLAR

Product	Product components	Weight, kg		Post-consumer material, weight-%	Renewable material, weight-%
K-FLEX SOLAR	Polymers	23,4	27,8%	0%	0%
	fillers	36,5	43,4%	0%	0%
	Plasticizer	16,9	20,1%	0%	0%
	Chemical additive (vulcanization agents)	10,7	12,7%	0%	0%
	Others	2,5	3%	0%	0%
	TOTAL	**84,0**	**100%**	**0%**	**0%**
	Packaging components	**Weight, kg**		**Weight-% (versus the product)**	
	Paperboard	10,5		12,5%	
	Pallet	6,3		7,5%	
	TOTAL	**16,8**		**20,0%**	

K-FLEX products not contain substances that are listed in the “Candidate List of Substances of Very High Concern for authorisation” in concentrations greater than 0,1%.

ENVIRONMENTAL INFORMATION

In order to reach the results reported below, one of the most widespread application software was used for the evaluation of the product life cycle, namely SimPro 9. Furthermore, the most recent databases on the production of materials, the production cycles in the metallurgical and chemical sector, transports and energy systems were used (Ecoinvent 3.5).

ASSESSMENT METHOD

The assessment methods adopted for the LCA study reported in this EPD are described in EN 15804 annex C “Impact categories and related indicators, methodologies and characterization factors”

Results of environmental impacts of 1 m³ of K-FLEX ST

Potential environmental impacts	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
GWP-fossil	kg CO_2 eq	2,15E+02	8,68E+00	7,26E+00	**2,31E+02**	0E+00	3,17E-01	0E+00	4,22E+00	0E+00
GWP-biogenic	kg CO_2 eq	2,52E-01	6,45E-04	1,79E-01	**4,32E-01**	0E+00	2,35E-05	0E+00	1,27E-04	0E+00
GWP-luluc	kg CO_2 eq	1,10E-01	1,73E-04	4,15E-02	**1,51E-01**	0E+00	5,83E-06	0E+00	4,19E-06	0E+00
GWP total	kg CO_2 eq	2,15E+02	8,68E+00	7,48E+00	**2,31E+02**	0E+00	3,17E-01	0E+00	4,22E+00	0E+00
ODP	mg CFC-11 eq	4,07E-05	2,05E-06	1,02E-06	**4,38E-05**	0E+00	7,48E-08	0E+00	1,15E-09	0E+00
AP	moli H^+ eq	1,56E+00	7,89E-02	3,43E-02	**1,67E+00**	0E+00	1,10E-03	0E+00	2,40E-04	0E+00
EP-freshwater	kg P eq	2,43E-01	8,27E-05	3,37E-03	**2,47E-01**	0E+00	2,99E-06	0E+00	4,63E-06	0E+00
EP-marine	kg N eq	5,73E-01	1,84E-02	1,42E-02	**6,06E-01**	0E+00	3,47E-04	0E+00	9,80E-02	0E+00
EP-terrestrial	moli N eq	2,63E+00	2,05E-01	1,06E-01	**2,94E+00**	0E+00	3,83E-03	0E+00	6,09E-04	0E+00
POCP	kg NMVOC eq	6,50E-01	5,45E-02	2,81E-02	**7,33E-01**	0E+00	1,04E-03	0E+00	1,22E-03	0E+00
ADP-min&met*	g Sb eq	1,12E-03	1,72E-08	2,25E-06	**1,12E-03**	0E+00	6,26E-10	0E+00	8,73E-10	0E+00
ADP-fossil*	MJ	3,58E+03	1,25E+02	9,60E+01	**3,80E+03**	0E+00	4,57E+00	0E+00	4,29E-02	0E+00
WDP*	m^3 eq	1,86E+02	2,99E-01	1,55E+00	**1,88E+02**	0E+00	9,04E-03	0E+00	3,49E-03	0E+00

** The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.*

Potential environmental impacts – additional indicator	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
GWP-GHG**	kg CO_2 eq	2,15E+02	8,68E+00	7,30E+00	**2,31E+02**	0E+00	3,17E-01	0E+00	4,22E+00	0E+00

*** The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.*

GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

Results of use of resources, waste production, output flows of 1 m³ of K-FLEX ST

Use of resources	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
PERE	MJ	1,14E+02	3,03E-01	7,84E+01	**1,93E+02**	0E+00	1,17E-02	0E+00	1,11E-01	0E+00
PERM	MJ	2,81E+01	1,11E-01	6,80E+01	**9,62E+01**	0E+00	4,63E-03	0E+00	4,99E-03	0E+00
PERT	MJ	1,43E+02	4,14E-01	1,46E+02	**2,89E+02**	0E+00	1,64E-02	0E+00	1,16E-01	0E+00
PENRE	MJ	3,29E+03	1,26E+02	1,09E+02	**3,53E+03**	0E+00	4,59E+00	0E+00	2,77E-01	0E+00
PENRM	MJ	5,58E+02	3,45E-04	1,33E+00	**5,60E+02**	0E+00	1,21E-05	0E+00	2,75E-06	0E+00
PENRT	MJ	3,85E+03	1,26E+02	1,11E+02	**4,09E+03**	0E+00	4,59E+00	0E+00	2,77E-01	0E+00
SM	kg	0E+00	0E+00	7,80E+00	**7,80E+00**	0E+00	0E+00	0E+00	0E+00	0E+00
RSF	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
NRSF	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
FW	m³	6,68E+00	1,30E-02	6,15E-02	**6,75E+00**	0E+00	4,75E-04	0E+00	3,81E-04	0E+00

Waste production	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
HW	kg	1,41E+00	3,83E-03	2,36E-01	**1,65E+00**	0E+00	5,07E-05	0E+00	6,64E-07	0E+00
NHW	kg	3,75E+00	1,77E-03	1,76E+01	**2,14E+01**	0E+00	6,62E-05	0E+00	4,65E+01	0E+00
RW	kg	6,55E-03	9,12E-04	4,05E-04	**7,87E-03**	0E+00	3,33E-05	0E+00	3,51E-06	0E+00

Output flows	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
REUSE	kg	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
RECYLE	kg	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
EN-REC	kg	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
EE-EL	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
EE-ET	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00

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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water; HP = Hazardous waste disposed; NHW = Non-hazardous waste disposed; RW = Radioactive waste disposed; REUSE = Components for reuse; RECYCLE = Materials for recycling; EN-REC = Materials for energy recovery; EE-EL = Exported energy, electricity; EE,TH = Exported energy, thermal

Results of environmental impacts of 1 m³ of K-FLEX EC

Potential environmental impacts	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
GWP-fossil	kg CO_2 eq	2,24E+02	9,11E+00	9,52E+00	**2,43E+02**	0E+00	3,30E-01	0E+00	4,41E+00	0E+00
GWP-biogenic	kg CO_2 eq	2,63E-01	6,76E-04	2,42E-01	**5,06E-01**	0E+00	2,45E-05	0E+00	1,33E-04	0E+00
GWP-luluc	kg CO_2 eq	1,14E-01	1,81E-04	5,59E-02	**1,71E-01**	0E+00	6,08E-06	0E+00	4,37E-06	0E+00
GWP total	kg CO_2 eq	2,25E+02	9,11E+00	9,82E+00	**2,43E+02**	0E+00	3,30E-01	0E+00	4,41E+00	0E+00
ODP	mg CFC-11 eq	4,25E-05	2,15E-06	1,31E-06	**4,59E-05**	0E+00	7,80E-08	0E+00	1,20E-09	0E+00
AP	moli H^+ eq	1,63E+00	8,25E-02	4,58E-02	**1,75E+00**	0E+00	1,15E-03	0E+00	2,51E-04	0E+00
EP-freshwater	kg P eq	2,54E-01	8,68E-05	4,51E-03	**2,58E-01**	0E+00	3,12E-06	0E+00	4,83E-06	0E+00
EP-marine	kg N eq	5,98E-01	1,93E-02	1,91E-02	**6,36E-01**	0E+00	3,62E-04	0E+00	1,02E-01	0E+00
EP-terrestrial	moli N eq	2,75E+00	2,14E-01	1,43E-01	**3,10E+00**	0E+00	4,00E-03	0E+00	6,35E-04	0E+00
POCP	kg NMVOC eq	6,78E-01	5,70E-02	3,61E-02	**7,71E-01**	0E+00	1,08E-03	0E+00	1,28E-03	0E+00
ADP-min&met*	g Sb eq	1,16E-03	1,81E-08	2,69E-06	**1,17E-03**	0E+00	6,53E-10	0E+00	9,10E-10	0E+00
ADP-fossil*	MJ	3,74E+03	1,31E+02	1,25E+02	**3,99E+03**	0E+00	4,76E+00	0E+00	4,47E-02	0E+00
WDP*	m^3 eq	1,94E+02	3,14E-01	2,02E+00	**1,97E+02**	0E+00	9,43E-03	0E+00	3,64E-03	0E+00

** The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.*

Potential environmental impacts – additional indicator	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
GWP-GHG**	kg CO_2 eq	2,24E+02	9,11E+00	9,58E+00	**2,43E+02**	0E+00	3,30E-01	0E+00	4,41E+00	0E+00

*** The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.*

GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

Results of use of resources, waste production, output flows of 1 m³ of K-FLEX EC

Use of resources	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
PERE	MJ	1,19E+02	3,18E-01	1,06E+02	**2,26E+02**	0E+00	1,22E-02	0E+00	1,16E-01	0E+00
PERM	MJ	2,93E+01	1,17E-01	9,21E+01	**1,22E+02**	0E+00	4,83E-03	0E+00	5,21E-03	0E+00
PERT	MJ	1,49E+02	4,35E-01	1,98E+02	**3,47E+02**	0E+00	1,71E-02	0E+00	1,21E-01	0E+00
PENRE	MJ	3,44E+03	1,32E+02	1,44E+02	**3,71E+03**	0E+00	4,79E+00	0E+00	2,89E-01	0E+00
PENRM	MJ	5,82E+02	3,62E-04	1,60E+00	**5,84E+02**	0E+00	1,26E-05	0E+00	2,87E-06	0E+00
PENRT	MJ	4,02E+03	1,32E+02	1,45E+02	**4,29E+03**	0E+00	4,79E+00	0E+00	2,89E-01	0E+00
SM	kg	0E+00	0E+00	1,08E+01	**1,08E+01**	0E+00	0E+00	0E+00	0E+00	0E+00
RSF	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
NRSF	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
FW	m³	6,96E+00	1,36E-02	8,19E-02	**7,06E+00**	0E+00	4,95E-04	0E+00	3,97E-04	0E+00

Waste production	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
HW	kg	1,47E+00	4,00E-03	2,47E-01	**1,72E+00**	0E+00	5,29E-05	0E+00	6,93E-07	0E+00
NHW	kg	3,92E+00	1,86E-03	2,38E+01	**2,77E+01**	0E+00	6,91E-05	0E+00	4,85E+01	0E+00
RW	kg	6,83E-03	9,57E-04	5,20E-04	**8,31E-03**	0E+00	3,47E-05	0E+00	3,66E-06	0E+00

Output flows	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
REUSE	kg	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
RECYLE	kg	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
EN-REC	kg	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
EE-EL	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
EE-ET	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00

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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water; HP = Hazardous waste disposed; NHW = Non-hazardous waste disposed; RW = Radioactive waste disposed; REUSE = Components for reuse; RECYCLE = Materials for recycling; EN-REC = Materials for energy recovery; EE-EL = Exported energy, electricity; EE,TH = Exported energy, thermal

Results of environmental impacts of 1 m³ of K-FLEX ECO

Potential environmental impacts	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
GWP-fossil	kg CO_2 eq	3,74E+02	1,41E+01	5,80E+01	**4,46E+02**	0E+00	5,08E-01	0E+00	6,77E+00	0E+00
GWP-biogenic	kg CO_2 eq	4,27E-01	1,05E-03	3,08E-01	**7,36E-01**	0E+00	3,77E-05	0E+00	2,04E-04	0E+00
GWP-luluc	kg CO_2 eq	2,41E-01	2,83E-04	7,12E-02	**3,13E-01**	0E+00	9,34E-06	0E+00	6,71E-06	0E+00
GWP total	kg CO_2 eq	3,75E+02	1,41E+01	5,84E+01	**4,47E+02**	0E+00	5,08E-01	0E+00	6,77E+00	0E+00
ODP	mg CFC-11 eq	6,33E-05	3,33E-06	1,23E-05	**7,89E-05**	0E+00	1,20E-07	0E+00	1,84E-09	0E+00
AP	moli H^+ eq	2,35E+00	1,38E-01	2,10E-01	**2,70E+00**	0E+00	1,76E-03	0E+00	3,85E-04	0E+00
EP-freshwater	kg P eq	2,92E-01	1,35E-04	6,12E-03	**2,98E-01**	0E+00	4,79E-06	0E+00	7,41E-06	0E+00
EP-marine	kg N eq	7,93E-01	3,16E-02	8,23E-02	**9,07E-01**	0E+00	5,57E-04	0E+00	1,57E-01	0E+00
EP-terrestrial	moli N eq	3,82E+00	3,52E-01	7,01E-01	**4,87E+00**	0E+00	6,14E-03	0E+00	9,76E-04	0E+00
POCP	kg NMVOC eq	1,09E+00	9,35E-02	1,89E-01	**1,37E+00**	0E+00	1,66E-03	0E+00	1,96E-03	0E+00
ADP-min&met*	g Sb eq	5,30E-04	2,80E-08	3,80E-06	**5,34E-04**	0E+00	1,00E-09	0E+00	1,40E-09	0E+00
ADP-fossil*	MJ	5,78E+03	2,04E+02	8,08E+02	**6,79E+03**	0E+00	7,32E+00	0E+00	6,87E-02	0E+00
WDP*	m^3 eq	2,40E+02	4,96E-01	3,88E+00	**2,44E+02**	0E+00	1,45E-02	0E+00	5,60E-03	0E+00

** The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.*

Potential environmental impacts – additional indicator	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
GWP-GHG**	kg CO_2 eq	3,74E+02	1,41E+01	5,81E+01	**4,47E+02**	0E+00	5,08E-01	0E+00	6,77E+00	0E+00

*** The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.*

GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

Results of use of resources, waste production, output flows of 1 m³ of K-FLEX ECO

Use of resources	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
PERE	MJ	2,02E+02	4,89E-01	1,35E+02	**3,37E+02**	0E+00	1,88E-02	0E+00	1,78E-01	0E+00
PERM	MJ	5,14E+01	1,78E-01	1,16E+02	**1,68E+02**	0E+00	7,41E-03	0E+00	8,00E-03	0E+00
PERT	MJ	2,54E+02	6,67E-01	2,51E+02	**5,05E+02**	0E+00	2,62E-02	0E+00	1,86E-01	0E+00
PENRE	MJ	5,92E+03	1,45E+03	1,83E+02	**7,55E+03**	0E+00	7,36E+00	0E+00	4,44E-01	0E+00
PENRM	MJ	3,52E+02	5,64E-04	2,21E+00	**3,55E+02**	0E+00	1,94E-05	0E+00	4,41E-06	0E+00
PENRT	MJ	6,27E+03	1,45E+03	1,85E+02	**7,91E+03**	0E+00	7,36E+00	0E+00	4,44E-01	0E+00
SM	kg	0E+00	0E+00	1,35E+01	**1,35E+01**	0E+00	0E+00	0E+00	0E+00	0E+00
RSF	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
NRSF	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
FW	m³	9,37E+00	2,11E-02	1,71E-01	**9,56E+00**	0E+00	7,61E-04	0E+00	6,10E-04	0E+00

Waste production	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
HW	kg	2,64E+00	6,69E-03	3,86E-01	**3,03E+00**	0E+00	8,13E-05	0E+00	1,06E-06	0E+00
NHW	kg	5,95E+00	2,87E-03	3,51E+01	**4,11E+01**	0E+00	1,06E-04	0E+00	7,45E+01	0E+00
RW	kg	1,16E-02	1,48E-03	5,39E-03	**1,84E-02**	0E+00	5,33E-05	0E+00	5,62E-06	0E+00

Output flows	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
REUSE	kg	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
RECYLE	kg	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
EN-REC	kg	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
EE-EL	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
EE-ET	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00

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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water; HP = Hazardous waste disposed; NHW = Non-hazardous waste disposed; RW = Radioactive waste disposed; REUSE = Components for reuse; RECYCLE = Materials for recycling; EN-REC = Materials for energy recovery; EE-EL = Exported energy, electricity; EE,TH = Exported energy, thermal

Results of environmental impacts of 1 m³ of K-FLEX SOLAR

Potential environmental impacts	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
GWP-fossil	kg CO_2 eq	2,98E+02	1,26E+01	3,25E+01	**3,43E+02**	0E+00	5,72E-01	0E+00	7,63E+00	0E+00
GWP-biogenic	kg CO_2 eq	2,52E-01	9,38E-04	2,50E-01	**5,02E-01**	0E+00	4,25E-05	0E+00	2,30E-04	0E+00
GWP-luluc	kg CO_2 eq	2,41E+00	2,44E-04	5,77E-02	**2,47E+00**	0E+00	1,05E-05	0E+00	7,57E-06	0E+00
GWP total	kg CO_2 eq	3,00E+02	1,26E+01	3,28E+01	**3,46E+02**	0E+00	5,72E-01	0E+00	7,63E+00	0E+00
ODP	mg CFC-11 eq	1,92E-04	2,98E-06	6,59E-06	**2,01E-04**	0E+00	1,35E-07	0E+00	2,07E-09	0E+00
AP	moli H^+ eq	2,12E+00	8,57E-02	1,22E-01	**2,33E+00**	0E+00	1,99E-03	0E+00	4,34E-04	0E+00
EP-freshwater	kg P eq	1,96E-01	1,20E-04	4,89E-03	**2,01E-01**	0E+00	5,41E-06	0E+00	8,36E-06	0E+00
EP-marine	kg N eq	6,67E-01	2,15E-02	4,78E-02	**7,36E-01**	0E+00	6,27E-04	0E+00	1,77E-01	0E+00
EP-terrestrial	moli N eq	3,15E+00	2,38E-01	4,00E-01	**3,79E+00**	0E+00	6,92E-03	0E+00	1,10E-03	0E+00
POCP	kg NMVOC eq	8,63E-01	6,36E-02	1,09E-01	**1,04E+00**	0E+00	1,87E-03	0E+00	2,21E-03	0E+00
ADP-min&met*	g Sb eq	1,51E-03	2,50E-08	3,55E-06	**1,51E-03**	0E+00	1,13E-09	0E+00	1,58E-09	0E+00
ADP-fossil*	MJ	5,44E+03	1,82E+02	4,50E+02	**6,07E+03**	0E+00	8,25E+00	0E+00	7,74E-02	0E+00
WDP*	m^3 eq	1,88E+02	4,05E-01	2,83E+00	**1,91E+02**	0E+00	1,63E-02	0E+00	6,31E-03	0E+00

** The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.*

Potential environmental impacts – additional indicator	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
GWP-GHG**	kg CO_2 eq	3,00E+02	1,26E+01	3,25E+01	**3,45E+02**	0E+00	5,72E-01	0E+00	7,63E+00	0E+00

*** The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.*

GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

Results of use of resources, waste production, output flows of 1 m³ of K-FLEX SOLAR

Use of resources	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
PERE	MJ	1,49E+02	4,52E-01	1,09E+02	**2,58E+02**	0E+00	2,12E-02	0E+00	2,01E-01	0E+00
PERM	MJ	4,13E+01	1,71E-01	9,39E+01	**1,35E+02**	0E+00	8,36E-03	0E+00	9,02E-03	0E+00
PERT	MJ	1,90E+02	6,23E-01	2,03E+02	**3,94E+02**	0E+00	2,95E-02	0E+00	2,10E-01	0E+00
PENRE	MJ	5,20E+03	1,83E+02	4,70E+02	**5,85E+03**	0E+00	8,29E+00	0E+00	5,01E-01	0E+00
PENRM	MJ	5,30E+02	4,94E-04	2,08E+00	**5,32E+02**	0E+00	2,19E-05	0E+00	4,97E-06	0E+00
PENRT	MJ	5,73E+03	1,83E+02	4,72E+02	**6,39E+03**	0E+00	8,29E+00	0E+00	5,01E-01	0E+00
SM	kg	0E+00	0E+00	1,05E+01	**1,05E+01**	0E+00	0E+00	0E+00	0E+00	0E+00
RSF	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
NRSF	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
FW	m³	8,11E+00	1,89E-02	1,19E-01	**8,25E+00**	0E+00	8,58E-04	0E+00	6,88E-04	0E+00

Waste production	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
HW	kg	6,67E-02	4,12E-03	4,13E-01	**4,84E-01**	0E+00	9,16E-05	0E+00	1,20E-06	0E+00
NHW	kg	4,38E+00	2,60E-03	2,69E+01	**3,12E+01**	0E+00	1,20E-04	0E+00	8,40E+01	0E+00
RW	kg	1,02E-02	1,33E-03	2,87E-03	**1,44E-02**	0E+00	6,01E-05	0E+00	6,34E-06	0E+00

Output flows	Unità	A1	A2	A3	Totale A1-A3	C1	C2	C3	C4	D
REUSE	kg	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
RECYLE	kg	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
EN-REC	kg	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
EE-EL	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
EE-ET	MJ	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00

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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water; HP = Hazardous waste disposed; NHW = Non-hazardous waste disposed; RW = Radioactive waste disposed; REUSE = Components for reuse; RECYCLE = Materials for recycling; EN-REC = Materials for energy recovery; EE-EL = Exported energy, electricity; EE,TH = Exported energy, thermal

Information on biogenic content of 1 m³ of K-FLEX ST, EC, ECO, SOLAR

Biogenic carbon content	Unità	K-FLEX ST	K-FLEX EC	K-FLEX ECO	K-FLEX SOLAR
Biogenic carbon content in product	kg	0	0	0	0
Biogenic carbon content in packaging	kg	5,51E+00	7,64E+00	9,60E+00	7,47E+00

ADDITIONAL ENVIRONMENTAL INFORMATION

UNI EN ISO 9001:2015 and ISO 14001 certified, the company offers a wide range of products that ensure quality, reliability and compliance with market standards. K-FLEX® products also play a very important role in conserving the environment by improving the relationship between energy consumption and pollutant emissions, controlling energy consumption and reducing the release of greenhouse gas in the atmosphere.

REFERENCES

1. ISO 14040:2006 Environmental management – Life cycle assessment - Principles and Framework
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4. PCR 2019:14 Construction products; version 1.0 valid until 2024.12.20
5. C-PCR-005 Thermal insulation products
6. EN 15804:2012+A2:2019 Sustainability of construction works – Environmental product declarations – Core rules for the product caregory of construction products
7. EN 16783:2017 Thermal insulation products – Product category rules (PCR) for factory made and in –situ formed products for preparing environmental product declarations
8. Rapporto LCA prodotti isolanti, revisione 01 – 2020.03.04
9. Association of Issuing Bodies, European Residual Mixes 2018

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Programme information

Programme:	The International EPD® System EPD International AB Box 210 60 SE-100 31 Stockholm Sweden www.environdec.com info@environdec.com

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. EPDs of construction products may not be comparable if they not comply with 15804. For further information about comparability, see EN 15804 and ISO 14025.

CEN standard EN 15804 serves as the core Product Category Rules (PCR)
Product category rules (PCR): 2019:14 Construction products, version 1.0; C-PCR-005 Thermal insulation products (EN 16783:2017)
PCR review was conducted by: *The Technical Committee of the International EPD® System. See www.environdec.com/TC for a list of members. Review chair: Claudia A Pena, Univerity of Concepcion, -cile. The review panel may be contacted via info@environdec.com.*
Independent third-party verification of the declaration and data, according to ISO 14025:2006: ☐ EPD process certification ☒ EPD verification
Third party verifier: *Ugo Pretato* Approved by: The International EPD® System Technical Committee, supported by the Secretariat
Procedure for follow-up of data during EPD validity involves third party verifier: ☐ Yes ☒ No