Environmental Product Declaration

In accordance with ISO 14025 and EN 15804:2012+A2:2019 for:

DIATHONITE Family: Diathonite Evolution, Diathonite Acoustix, Diathonite Acoustix+, Diathonite Deumix+, Diathonite Screed, Diathonite Thermactive.037, Diathonite Sismactive

From ***DIASEN SRL***

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	S-P-03516
Publication date:	2021-04-29
Version date:	2022-09-21
Valid until:	2026-04-05

General information

Programme information

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

CEN standard EN 15804 funge da Core Product Category Rules (PCR)
Product category rules (PCR): *PCR 2019:14 Construction products, Version 1.11*
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, University of Concepcion, Chile. 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: CERTIQUALITY srl, Via G.Gardino n.4, Milano Accredited by: A*ccredia, n°003Hrev.17*
Procedure for follow-up of data during EPD validity involves third party verifier: ☐ Yes ☑ No

DIASEN ITALIA, as EPD owner, has the sole ownership, liability, and responsibility for the EPD. The owner of the EPD has sole ownership and responsibility for the EPD.

EPDs within the same product category but belonging to different programmes may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804. For further information on comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD: Diasen Srl

Contact: Davide Tomassoni

Description of the organisation:
Diasen is an Italian company operating in the ecological building sector, which oriented its production target towards innovative, low environmental impact, high technological content and quality products. For the purpose, the company provides high performance and green solutions in terms of thermal and acoustic insulating systems, waterproofing systems, coatings and coverings for the public, private and sport building sector.
The respect of the legislation, regulations and prescriptions applicable to the environmental protection, as well as to the reduction and control of environmental impacts, are the basic principles that characterize each single project. Since 2007 Diasen has carried out a certified Environmental Management System in compliance with the standard EN ISO 14001. Moreover, **LEED mapping** for 14 key products has been pursued.
Specific attention is paid to the reduction of waste production through a careful and effective activity of monitoring and control, by favouring, when possible, the production of recoverable waste.
Research and Development activity, is focused on the possibility of using raw materials deriving from manufacturing waste or from recoverable waste. The planning phases is oriented to thermo-insulating products to reduce the energy use and consumption inside the house.

Product-related or management system-related certifications: ISO 9001:2015 - EN ISO 14001:2015

Name and location of production site: DIASEN SRL - Zona Ind. Berbentina, 5 - 60041 Sassoferrato (AN) - Italy

Manufacturing

The manufacturing process starts from raw materials storage as they are received from suppliers. For this purpose, some raw materials arrive in big bags, while others come with no packages, thus are stored inside specific silos. These materials are automatically fed in the production mixer. Other materials arrive in their package and are stored in the warehouse. Afterwards, they are sent to the mixer by mean of an electric forklift or fed to the mixer.
Moreover a bulk raw material is stored in specific container and subjected to a proper volume reduction process through a specific milling stage. Subsequently it is added in the production mixer, according to the formula of the products.
The production is a discontinuous process, in which all the components are mechanically mixed in batches. The product is then packaged in bags, placed on wooden pallets, protected with a hooding polymer film and stored in the Finished Products' warehouse. The quality of final product is controlled during the production phase and also before the sale.
This manufacturing process does not involve water and it is almost a close-loop process, without scraps and wastes. Most of the residual dust, collected in the filter system during production, are returned to the production process.

Product information

1. Product name: DIATHONITE EVOLUTION
   Product identification: see table 1
   Product description: Natural plaster, for external wall insulation, formulated with cork, natural hydraulic lime, clay and diatomaceous earth, with high thermal insulation power, sound absorbing, breathable and dehumidifying.
   UN CPC code: 37410 – Plaster
   DIASEN PRODUCT CODE: 1946136;

2. Product name: DIATHONITE ACOUSTIX
Product identification: see table 2
Product description: Natural plaster with high dehumidifying capacity, formulated with cork, pure natural hydraulic lime, clay and Diatomaceous powders. To be used for dehumidification and restoration of walls affected by rising damp.
UN CPC code: 37410 – Plaster
DIASEN PRODUCT CODE: 2006037;

3. Product name: DIATHONITE ACOUSTIX+
Product identification: see table 3
Product description: Premixed plaster used in the production of sound absorbing coatings for wall and ceilings, formulated with cork, clay, Diatomaceous powder, and natural hydraulic lime. It is characterised also by good breathability, thermal insulation, dehumidifying properties and good fire resistance.
UN CPC code: 37410 – Plaster
DIASEN PRODUCT CODE: 2027013;

4. Product name: DIATHONITE DEUMIX+
Product identification: see table 4
Product description: Lightened, macro-porous plaster with by dehumidifying and salt proof Characteristics, which is formulated with cork, clay, and natural hydraulic lime, other than functional additives, improving adhesion to common supports and breathability.
UN CPC code: 37410 – Plaster
DIASEN PRODUCT CODE: 1720500;

5. Product name: DIATHONITE SCREED
Product identification: see table 5
Product description: Fibre-reinforced mat formulated with cork, clay, Diatomaceous powder and hydraulic binders to be used in the production of thermally insulating, for slabs, floor and ventilated roofs.
UN CPC code: 37410 - Plaster
DIASEN PRODUCT CODE: 2005273;

6. Product name: DIATHONITE THERMACTIVE.037
Product identification: see table 6
Product description: Natural thermal coat, formulated with expanded amorphous silica, perlite and pumice, natural hydraulic lime. It is characterised by antibacterial properties, fire resistance, porosity and breathability.
UN CPC code: 37410 - Plaster
DIASEN PRODUCT CODE: 2004234;

7. Product name: DIATHONITE SISMACTIVE
Product identification: see table 7
Product description: Natural thermal mortar, formulated with clay, Diatomaceous powder and natural hydraulic lime to be used in combination with reinforcing networks for reinforcing plasters.
UN CPC code: 37410 – Plaster
DIASEN PRODUCT CODE: 2005273;

***Table 1**: Diathonite Evolution.*

Property	Value	Test methodology	Technical specification
Thermal Conductivity (W/mK)	0,045	UNI EN 1745	EN 998-2
Compression Strength (N/mm²)	M2,5	UNI EN 998-2	
Fire reaction	Class A1	UNI EN 13501-1	
Vapour permeability coefficient - μ	4	UNI EN 1015-19	
Capillarity water absorption (kg/m²h^{0,5})	0,40	UNI EN 1015-18	
Adhesion (N/mm²)	≥ 0,10 – FP:B	UNI EN 1015-12	
Specific weight (kg/m³)	360 ± 20	UNI EN 1015-15	
CI Content (%)	0,011	UNI EN 1015-17	
Hazardous substances	Lime (chemical) - Hydraulic method; Calcium Di-hydroxide	CE Regulation 1272/2008	

***Table 2**: Diathonite Acoustix.*

Property	Value	Test methodology	Technical specification
Thermal Conductivity (W/mK)	0,083	UNI EN 1745	EN 998-2
Compression Strength (N/mm²)	M5	UNI EN 998-2	
Fire reaction	Class A1	UNI EN 13501-1	
Vapour permeability coefficient - μ	4	UNI EN 1015-19	
Capillarity water absorption (kg/m²h^{0,5})	0,35	UNI EN 1015-18	
Adhesion (N/mm²)	≥ 0,10 – FP:B	UNI EN 1015-12	
Specific weight (kg/m³)	470 ± 30	UNI EN 1015-15	
CI Content (%)	0,019	UNI EN 1015-17	
Hazardous substances	Lime (chemical) - Hydraulic method; Calcium Di-hydroxide	CE Regulation 1272/2008	

***Table 3**: Diathonite Acoustix^{+}.*

Property	Value	Test methodology	Technical specification
Thermal Conductivity (W/mK)	0,075	UNI EN 1745	EN 998-2
Compression Strength (N/mm²)	M2,5	UNI EN 998-2	
Fire reaction	Class A1	UNI EN 13501-1	
Vapour permeability coefficient - μ	4	UNI EN 1015-19	
Capillarity water absorption (kg/m²h^{0,5})	0,35	UNI EN 1015-18	
Adhesion (N/mm²)	≥ 0,10 – FP:B	UNI EN 1015-12	
Specific weight (kg/m³)	400 ± 30	UNI EN 1015-15	
CI Content (%)	0,019	UNI EN 1015-17	
Hazardous substances	Lime (chemical) - Hydraulic method; Calcium Di-hydroxide	CE Regulation 1272/2008	

***Table 4**: Diathonite Deumix^{+}.*

Property	Value	Test methodology	Technical specification
Thermal Conductivity (W/mK)	0,080	UNI EN 1745	EN 998-2
Compression Strength (N/mm²)	M5	UNI EN 998-2	
Fire reaction	Class A1	UNI EN 13501-1	
Vapour permeability coefficient - μ	4	UNI EN 1015-19	
Capillarity water absorption (kg/m²h^{0,5})	0,63	UNI EN 1015-18	
Adhesion (N/mm²)	≥ 0,10 – FP:B	UNI EN 1015-12	
Specific weight (kg/m³)	450 ± 10	UNI EN 1015-15	
CI Content (%)	0,015	UNI EN 1015-17	
Hazardous substances	Lime (chemical) - Hydraulic method; Calcium Di-hydroxide	CE Regulation 1272/2008	

***Table 5**: Diathonite Screed.*

Property	Value	Test methodology	Technical specification
Thermal Conductivity (W/mK)	0,060	UNI EN 1745	EN 13813
Compression Strength (N/mm²)	M5	UNI EN 998-2	
Fire reaction	Class A1	UNI EN 13501-1	
Vapour permeability coefficient - μ	4	UNI EN 1015-19	
Capillarity water absorption (kg/m²h^{0,5})	ND	UNI EN 1015-18	
Adhesion (N/mm²)	ND	UNI EN 1015-12	
Specific weight (kg/m³)	600 ± 10	UNI EN 1015-15	
CI Content (%)	ND	UNI EN 1015-17	

Hazardous substances	Lime (chemical) - Hydraulic method; Calcium Di-hydroxide	CE Regulation 1272/2008	

***Table 6**: Diathonite Thermactive.037*

Property	Value	Test methodology	Technical specification
Thermal Conductivity (W/mK)	0,037	UNI EN 1745	EN 998-2
Compression Strength (N/mm²)	M2,5	UNI EN 998-2	
Fire reaction	Class A1	UNI EN 13501-1	
Vapour permeability coefficient - μ	3	UNI EN 1015-19	
Capillarity water absorption (kg/m²h^{0,5})	1,00	UNI EN 1015-18	
Adhesion (N/mm²)	≥ 0,10 – FP:B	UNI EN 1015-12	
Specific weight (kg/m³)	250 ± 10	UNI EN 1015-15	
CI Content (%)	0,012	UNI EN 1015-17	
Hazardous substances	Lime (chemical) - Hydraulic method; Calcium Di-hydroxide, Sodium salt of salicylic acid, Potassium salt of salicylic acid	CE Regulation 1272/2008	

***Table 7**: Diathonite Sismactive.*

Property	Value	Test methodology	Technical specification
Thermal Conductivity (W/mK)	0,065	UNI EN 1745	EN 998-2
Compression Strength (N/mm²)	M10	UNI EN 998-2	
Fire reaction	Class A1	UNI EN 13501-1	
Vapour permeability coefficient - μ	5	UNI EN 1015-19	
Capillarity water absorption (kg/m²h^{0,5})	0,30	UNI EN 1015-18	
Adhesion (N/mm²)	≥ 0,50 – FP:B	UNI EN 1015-12	
Specific weight (kg/m³)	600 ± 60	UNI EN 1015-15	
CI Content (%)	0,015	UNI EN 1015-17	
Hazardous substances	Lime (chemical) - Hydraulic method; Calcium Di-hydroxide	CE Regulation 1272/2008	

Properties summarized in tables from 1 to 7 can be collected from TDS (Technical Data Sheet) related to each products. Characterisation tests have been carried out both in external laboratories and in Diasen's in-house laboratory, all in accordance with Regulation 305/11.

For the purpose, the bags used are paper and plastic-based (coupled) according to the related size:

- Diathonite Evolution: 18 kg;
- Diathonite Acoustix, Diathonite Acoustix⁺ and Diathonite Deumix⁺Products: 20 kg;
- Diathonite Screed and Diathonite Sismactive are supplied in 25 kg;
- Diathonite Thermactive.037: 15 kg;

Content information

***Table 8:** Content declaration and substances list for the system Diathonite Evolution.*

Components	Weight (%)	EC No.	CAS No.	Recycled material (%)	Renewable material (%)
Diatomaceous powder	0.04 ÷ 0.07	310-127-6	68855-54-9	0	-
Cork	0.45 ÷ 0.55	-	61789-98-8	85 (post-industrial)	100
Clay	0.10 ÷ 0.15	-	1332-58-7	0	-
Hydraulic Lime	0.10 ÷ 0.15	285-561-1	85117-09-5	0	-
Hydrated Lime	0.15 ÷ 0.19	215-137-3	1305-62-0	0	-
Polypropylene Fibres	< 0.01	-	-	0	-
Organic Additives	0.04 ÷ 0.07	-	9004-65-3	0	-
Inorganic Additives	< 0.01	143-22-6	205-592-53	0	-

***Table 9:** Content declaration and substances list for the system Diathonite Acoustix.*

Components	Weight (%)	EC No.	CAS No.	Recycled material (%)	Renewable material (%)
Diatomaceous powder	0.03 ÷ 0.06	310-127-6	68855-54-9	0	-
Cork	0.45 ÷ 0.55	-	61789-98-8	85 (post-industrial)	100
Clay	0.10 ÷ 0.15	-	1332-58-7	0	-
Hydraulic Lime	0.10 ÷ 0.15	285-561-1	85117-09-5	0	-

Hydrated Lime	0.15 ÷ 0.19	215-137-3	1305-62-0	0	-
Polypropylene Fibres	< 0.01	-	-	0	-
Organic Additives	0.05 ÷ 0.08	-	9004-65-3	0	-
Inorganic Additives	< 0.01	143-22-6	205-592-53	0	-

Table 10: *Content declaration and substances list for the system Diathonite Acoustix⁺.*

Components	Weight (%)	EC No.	CAS No.	Recycled material (%)	Renewable material (%)
Diatomaceous powder	0.04 ÷ 0.07	310-127-6	68855-54-9	0	-
Cork	0.47 ÷ 0.52	-	61789-98-8	85 (post-industrial)	100
Clay	0.10 ÷ 0.15	-	1332-58-7	0	-
Hydraulic Lime	0.08 ÷ 0.12	285-561-1	85117-09-5	0	-
Hydrated Lime	0.15 ÷ 0.18	215-137-3	1305-62-0	0	-
Polypropylene Fibres	< 0.01	-	-	0	-
Organic Additives	0.05 ÷ 0.08	-	9004-65-3	0	-
Inorganic Additives	< 0.01	143-22-6	205-592-53	0	-

Table 11: *Content declaration and substances list for the system Diathonite Deumix⁺.*

Components	Weight (%)	EC No.	CAS No.	Recycled material (%)	Renewable material (%)
Diatomaceous powder	0.02 ÷ 0.06	310-127-6	68855-54-9	0	-
Cork	0.42 ÷ 0.48	-	61789-98-8	85 (post-industrial)	100
Clay	0.11÷ 0.16	-	1332-58-7	0	-
Hydraulic Lime	0.15 ÷ 0.19	285-561-1	85117-09-5	0	-
Hydrated Lime	0.17 ÷ 0.21	215-137-3	1305-62-0	0	-
Polypropylene Fibres	< 0.01	-	-	0	-
Organic Additives	0.01 ÷ 0.05	-	9004-65-3	0	-
Inorganic Additives	< 0.01	143-22-6	205-592-53	0	-

Table 12: *Content declaration and substances list for the system Diathonite Screed.*

Components	Weight (%)	EC No.	CAS No.	Recycled material (%)	Renewable material (%)
Diatomaceous powder	0,02 ÷ 0,05	310-127-6	68855-54-9	0	-
Cork	0,37 ÷ 0,44	-	61789-98-8	85 (post-industrial)	100
Clay	0,18 ÷ 0,22	-	1332-58-7	0	-
Hydraulic Lime	0,14 ÷ 0,18	285-561-1	85117-09-5	0	-
Hydrated Lime	0,16 ÷ 0,20	215-137-3	1305-62-0	0	-
Polypropylene Fibres	< 0,01	-	-	0	-
Organic Additives	0,01 ÷ 0,05	-	9004-65-3	0	-
Inorganic Additives	< 0,01	143-22-6	205-592-53	0	-

Table 13: *Content declaration and substances list for the system Diathonite Thermactive.037.*

Components	Weight (%)	EC No.	CAS No.	Recycled material (%)	Renewable material (%)
Diatomaceous powder	0.03 ÷ 0.06	310-127-6	68855-54-9	0	-
Cork	0.48 ÷ 0.51	-	61789-98-8	85 (post-industrial)	100
Pumice	0.05 ÷ 0.09	-	1332-58-7	0	-
Perlite	0.02 ÷ 0.04	285-561-1	85117-09-5		-
Expanded Silica	0.03 ÷ 0.07	215-137-3	1305-62-0	0	-
Hydraulic Lime	0.10 ÷ 0.15	-	-	0	-
Hydrated Lime	0.12 ÷ 0.16	-	9004-65-3	0	-
Polypropylene Fibres	< 0.01	143-22-6	205-592-53	0	-
Organic Additives	0.4 ÷ 0.07	310-127-6	68855-54-9	0	-
Inorganic Additives	< 0.01	-	61789-98-8	0	-

Table 14: *Content declaration and substances list for the system Diathonite Sismactive.*

Components	Weight (%)	EC No.	CAS No.	Recycled material (%)	Renewable material (%)
Diatomaceous powder	0.04 ÷ 0.07	310-127-6	68855-54-9	0	-
Cork	0.42 ÷ 0.48	-	61789-98-8	85 (post-industrial)	100
Clay	0.11 ÷ 0.16	-	1332-58-7	0	-
Hydraulic Lime	0.10 ÷ 0.14	285-561-1	85117-09-5	0	-
Hydrated Lime	0.16 ÷ 0.20	215-137-3	1305-62-0	0	-

Polypropylene Fibres	< 0.01	-	-	0	-
Organic Additives	0.03 ÷ 0.06	-	9004-65-3	0	-
Inorganic Additives	< 0.01	143-22-6	205-592-53	0	-

The products are not classified as hazardous or dangerous for the environment in accordance with Directives 67/548/EEC and 1999/45/EC. There are no substances included in the Authorisation List (Attachment XIV) or the Candidate List of Substances of Very High Concern for Authorisation issued by the European Chemicals Agency, nor do they contain such substances.

***Table 15**: Raw materials used in the family products of Diathonite.*

Material	Hazard Phrase	Function
Diatomaceous powders	H315; H319; H335	Thermal and Acoustic Insulation
Cork	No	Thermal Insulation
Clay	No	Hygroscopic enhancing properties
Hydrated Lime	H315; H318; H335	Natural and antibacterial binder
Hydraulic Lime	H315; H318; H335	Natural binder
Polypropylene Fibres	No	Flexural and cracking strength
Organic Additives	No	Adhesion, working-ability and Flexibility
Inorganic Additives	H228; H315; H318; H335	Aerating and anti-shrinkage
Pumice	No	Light Thermal and Acoustic Insulation
Perlite	No	Light Thermal and Acoustic Insulation
Expanded silica	N.D.	Light Thermal and Acoustic Insulation

Under normal storage and use conditions, these products can be handled with no particular precautions or special protective equipment.

LCA information

Product environmental performance was assessed using the *Life Cycle Assessment* (LCA) method, in accordance with the EN ISO 14044:2006 standard, and the *Life Cycle Impact assessment* (LCIA) method, in accordance with standard UNI EN 15804:2014 + A2:2019, served as the core PCR. On this regards**,** *Product Category Rules* (PCR) – "Construction Products PCR 2019:14 - Version 1.11" was used as reference document. The results of the estimated environmental impacts are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks. The field of application of the different products is quite the same, despite the related properties are a little bit different. Any products could perform several functionalities inside a building component (also different performances), thus the definition of a single and specific functionality for each product is quite difficult. For this reason, a declared unit has been taken into account instead of a functional unit, as recommended by the used standardisation.
It has to be pointed out that the production of the investigated systems takes place inside the Diasen Manufacturing Plant in Sassoferrato (AN) – Italy.

Declared unit and Reference service life :
1 kg of product as dry product mix is defined as Declared Unit (DU).
The environmental impact of 1 kg of powder product (packaging included) for each products involved is described. According to the system boundary of this EPD, a Reference Service Life has not been provided.

Time representativeness: Data are referred to the production carried out in 2020 and have been provided by Diasen Srl. Also data regarding the geographic origin of any raw materials, packaging materials etc. have been provided, as well as the transportation media.

Database and LCA software used: Ecoinvent 3.8 used as a database and SimaPrò Version 9.3 as a software

Description of system boundaries:
Cradle to gate (A1–A3).

In the declared modules the following activities have been conasidered:

- Phase A1: raw materials together with the related packaging, as in the case of PP fibers (plastic bags), additives and and Diathonite powder (kraft paper bags), or with no packages if returned to the producers, as in the case of Clay, Hydrated and Hydraulic lime, Perlite, Pumice, expanded silica, etc. Also energies of production (cork milling, powder mixing) and related to the company utilities (mainly compressed air) have been included in this module;
- Phase A2: Transports of raw materials (and packages if existing) and packages used to purchase the investigated products. Also produced waste transport to treatment plants has been included;
- Phase A3: emissions (powder collected by scrubbers and abatement systems), wastes related to auxiliary packages the used raw materials are provided with. The latter kinds have been considered being sent to the appropriate collecting systems;

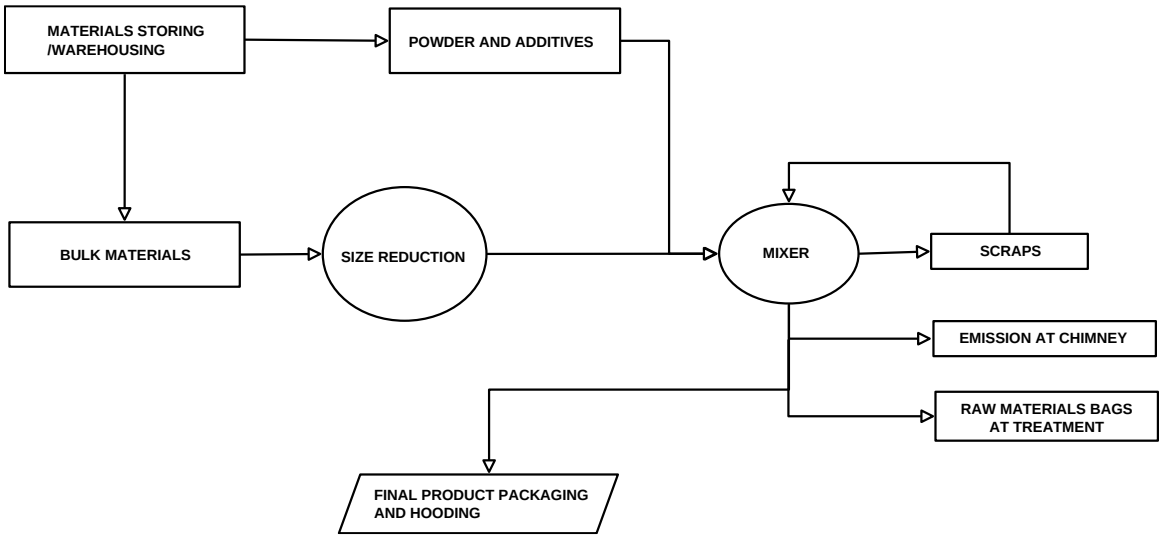


***Figure 1**: Preliminary scheme of the Diathonite family Production phase.*

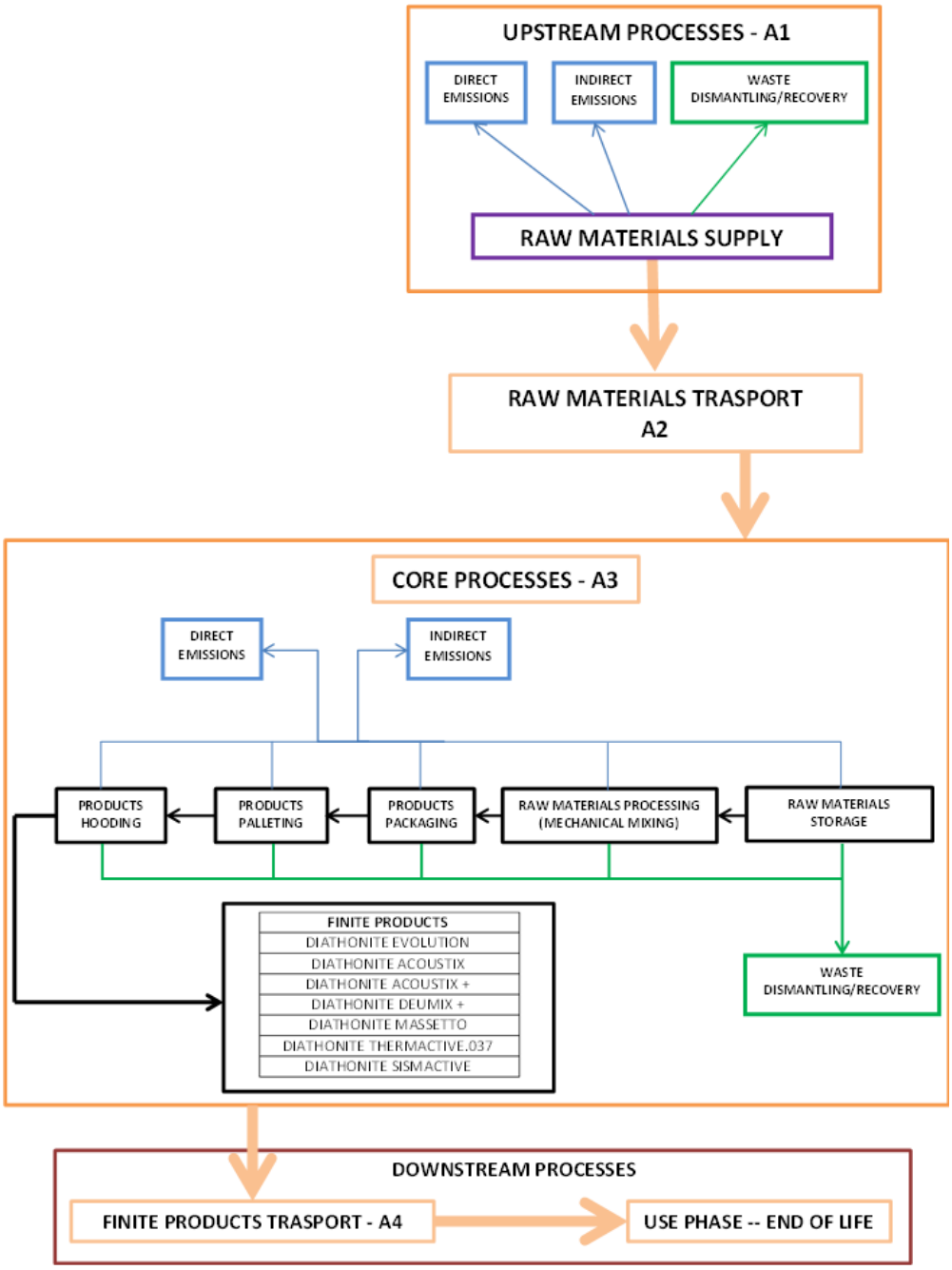
Some raw materials are conveyed or transported to in the mixing plant as received, while cork is subjected to milling operations and subsequently sent to the mixing plant, as described in the scheme of figure 1.

***Table 16:** Reporting table for Diathonite Family: Evolution, Acoustix, Acoustix$^+$, Deumix$^+$, Massetto, Thermactive.037, Sismactive.*

	Product stage		Construction process stage			Use stage							End of life stage				Resource recovery stage
	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
Module	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Geography	IT	IT	IT	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Specific data						-	-	-	-	-	-	-	-	-	-	-	-

Variation - Products		-	-	-	-	-	-	-	-	-	-	-	-
Variation - Sites		-	-	-	-	-	-	-	-	-	-	-	-

System diagram:



More information:
Name and contact information of the organisation carrying out the underlying LCA study: University of Perugia – Strada di Pentima, 4 – 05100 –Terni (Italy)

Assumption and Estimation:
In accordance with the General Programme Instructions for the International EPD® System (2015) and the reference PCR, secondary materials -such as cork- are contained only in the Diathonite family.
This constituent has be accounted adopting the following approach:

- Environmental impacts related to the “previous life cycle” have not been considered;
- Secondary materials does not need to be processed before the new use;

- Transports to the factory gate have been considered;
- The energy content associated to the secondary material which contains energy (Cork) has been estimated considering the gross calorific value (19,6 MJ/kg) and presented as secondary energy resource (feedstock energy from waste or scraps or similar);

The whole amount of expanded cork is recycled (or it becomes a secondary material), and it comes from the recovering of industrial processing scrap (no end of life but pre-consumer product).

***Table 17**: Recycled materials used in the production process of Diasen Product.*

Material	Weight fraction in Diasen products (%)	Recycled content (%)	Definition
Cork	40 ÷ 50	85	PRE-consumer recycled content is defined as materials that are diverted from the manufacturing waste stream and used to make a new product. Normally, the materials are purchased from companies that collect discarded waste from other manufacturers. To qualify, the materials must be considered a waste product and not normally reused by industry within the original manufacturing process. Paper product scraps that must be re pulped can be considered PRE-consumer content

Product	Recycled Cork (%)
Diathonite Evolution	39.95
Diathonite Acoustix	
Diathonite Acoustix^{+}	42.50
Diathonite Deumix^{+}	38.25
Diathonite Sismactive	
Diathonite Screed	34.00
Diathonite Thermactive.037	41.23

About the used additives, both organic and inorganic counterpart, their composition has been modelled according to the information contained in the related technical and safety data sheet, provided by the specific provider.
Transports of both raw materials and packaging, from provider's sites to Diasen Processing plant, have been carried out by mean EURO4 lorries. This data represent the Italian road Transport system average framework.
The data regarding energy consumption were accurately calculated on the basis of specific measurement campaigns, on the base of the most recent Italian Residual Mix.
About the packaging, as it is strongly dependant from the product, it is summarized in the following table:

***Table 18**: Packages for the Diathonite series.*

Product	Evolution	Acoustix	Acoustix^{+}	Deumix^{+}	Massetto	Thermactive.037	Sismactive
Weight (kg/bag)	18.00	20.00	20.00	20.00	25.00	15.00	25.00
N° bag/Pallet	60	60	60	60	60	60	60
Paper bag (kg/kg product)	$9{,}00*10^{-3}$	$8{,}10*10^{-3}$	$8{,}13*10^{-3}$	$8{,}13*10^{-3}$	$6{,}48*10^{-3}$	$1{,}08*10^{-2}$	$6{,}48*10^{-3}$
Film PE (kg/kg product)	$3{,}70*10^{-4}$	$3{,}30*10^{-4}$	$3{,}30*10^{-4}$	$3{,}30*10^{-4}$	$3{,}20*10^{-4}$	$4{,}40*10^{-4}$	$3{,}20*10^{-4}$
Euro-pallet (unit/kg product)	$9{,}30*10^{-4}$	$8{,}30*10^{-4}$	$8{,}30*10^{-4}$	$8{,}30*10^{-4}$	$8{,}00*10^{-4}$	$1{,}11*10^{-3}$	$8{,}00*10^{-4}$

Cut-off criteria:
The consumption of raw materials and energy related to ordinary and extraordinary maintenance operations was not included, as well as energy consumption associated to illumination and heating of personnel, since it has been experienced that the related environmental impact calculations is not relevant.

Allocation criteria:
About the production phase in the manufacturing plant, energy consumption and emissions have been referred to at any single production stage, in order to avoid any allocation procedure. For data collected from Ecoinvent database, the related allocation allocation has been taken into account.

Data quality:
As introduced, the background data used in this EPD were retrieved from the Ecoinvent 3.8 database. For inventory modelling, SimaPro 9.3 software was used. The geographical reference was Italy, while for raw materials the most relevant data are referred to Europe (specific data from the related producer have been collected. As a spanned time period, the last 5 years has been assumed. About the raw materials, the most relevant data are European or specific from supplier. Finally, the reference time period for the LCA (product composition, transport, production rates, etc.) are referred to 2021. Data collection included the analysis of production and environmental internal data (situ-specific data) regarding the whole range of production processes included in the LCA.

Data comparability:
All the data and results related to Diathonite products were collected and obtained based on the EN 15804 standard, in the context of their final use in the building manufacturing system. Thus, the environmental impacts associated with the Diathonite products are comparable with the environmental impacts of other similar products calculated according to the same UNI EN 15804 standard.

Environmental Information

Environmental profiles of the products covered by this EPD, using the LCA method, have been reported in this section.
As introduced, a "*Cradle-to-gate*" approach has been carried out, and phases A1-A3 have been included within the system boundaries. Different calculation tools have been used, as recommended by the EPD regulation.

Potential environmental impact – mandatory indicators according to EN 15804

- **Global Warming Potential (GWP):** It is directly linked to Climate Change**,** as a measure of greenhouse gas emissions, such as carbon dioxide and methane. These emissions increase absorption of radiation emitted by the earth, intensifying the natural greenhouse effect;

- **Abiotic Depletion Potential (ADP):** It directly regards the consumption of resources in relation to the corresponding source current availability. The exploitation of non-renewable resources leads to a decrease in the future availability of the related performed functions. This impact category can be shared in depletion of mineral resource elements (ADPE) and non-renewable fossil energy resources (ADPF). In the report these are reported separately;

- **Ozone Depletion Potential (ODP):** This indicator directly regards the increase in the tropospheric zone hole. It is another measure of the emissions of greenhouses gasses, as they increase the absorption of radiation emitted by the earth, which increases also the natural greenhouse effect;

- **Photochemical Ozone Creation Potential (POCP):** Photochemical Smog**.** It is a measure of precursors emissions contributing to ground level smog formation (mainly ozone O_3), produced by the reaction of volatile organic compounds (VOCs) and carbon monoxide in the presence of nitrogen oxides under the influence of UV light. Ground level ozone can be harmful for human and ecosystem health and may also damage agriculture;

- **Acidification Potential (AP):** It is related to the Acid Rains. It is a measure of emissions leading to acidifying effects on the environment. From a technical base point, the involved indicator is a measure of the capacity of a given molecule or chemical species to increase the hydrogen ion (H^+) concentration in the water (lakes, rivers, etc.), thus decreasing the related pH value. Moreover, potential effects include forest and building materials deterioration;

- **Eutrophication Potential (EP):** It regards the Algal Blooms. It is a measure of nutrient enrichment that can lead to an undesirable shift in species composition and elevated biomass production in terrestrial and aquatic ecosystems. It includes potential impacts of excessively high levels of nitrogen and phosphorus macronutrients.

Table 19: *Impact indicators for the system Diathonite Evolution.*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot. (A1-A3)**
GWP-total	kg CO_2 eq.	$7,87*10^{-1}$	$3,76*10^{-2}$	$3,70*10^{-2}$	$8,62*10^{-1}$
GWP-fossil	kg CO_2 eq.	$7,37*10^{-1}$	$3,73*10^{-2}$	$1,82*10^{-2}$	$7,93*10^{-1}$
GWP-biogenic	kg CO_2 eq.	$4,95*10^{-2}$	$2,59*10^{-4}$	$1,88*10^{-2}$	$4,95*10^{-2}$
GWP-luluc	kg CO_2 eq.	$2,95*10^{-4}$	$1,50*10^{-5}$	$5,94*10^{-5}$	$2,95*10^{-4}$
ODP	kg CFC 11 eq.	$1,98*10^{-7}$	$6,98*10^{-9}$	$1,87*10^{-9}$	$2,07*10^{-7}$
AP	mol H^+ eq.	$2,64*10^{-3}$	$2,23*10^{-4}$	$1,06*10^{-4}$	$2,97*10^{-3}$
	kgSO_2_eq.	$2,25*10^{-3}$	$1,97*10^{-4}$	$9,10*10^{-5}$	$2,54*10^{-3}$
Eutroph. Aq. Freshwater	kg_ P_eq.	$8,30*10^{-5}$	$2,38*10^{-6}$	$1,24*10^{-5}$	$9,78*10^{-5}$
	kg PO_4^3 eq.	$2,55*10^{-4}$	$7,31*10^{-6}$	$3,81*10^{-5}$	$3,00*10^{-4}$
Eutroph. Aq. Marine	kg_ N_eq.	$6,73*10^{-6}$	$2,18*10^{-7}$	$1,76*10^{-6}$	$8,71*10^{-6}$
Eutrophication Terrestrial	mole N_eq.	$5,46*10^{-3}$	$8,00*10^{-4}$	$3,01*10^{-4}$	$6,56*10^{-3}$
POCP	kg NMVOC eq.	$1,58*10^{-3}$	$2,25*10^{-4}$	$1,06*10^{-4}$	$1,91*10^{-3}$
ADP-minerals& metals*	kg Sb eq.	$1,54*10^{-6}$	$1,15*10^{-7}$	$1,18*10^{-7}$	$1,77*10^{-6}$
ADP-fossil*	MJ	6,01	0,564	0,369	6,94
Water Use*	m^3_world eq. depr	$8,88*10^{-2}$	$1,76*10^{-3}$	$1,22*10^{-2}$	0,103
GWP - GHG	kg CO_2 eq.	0,737	$3,73*10^{-2}$	$1,83*10^{-2}$	0,793

Table 20: *Impact indicators for the system Diathonite Acoustix.*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot. (A1-A3)**
GWP-total	kg CO_2 eq.	$8,66*10^{-1}$	$3,76*10^{-2}$	$3,31*10^{-2}$	$9,37*10^{-1}$
GWP-fossil	kg CO_2 eq.	$8,04*10^{-1}$	$3,73*10^{-2}$	$1,62*10^{-2}$	$8,58*10^{-1}$
GWP-biogenic	kg CO_2 eq.	$6,15*10^{-2}$	$2,59*10^{-4}$	$1,69*10^{-2}$	$7,86*10^{-2}$
GWP-luluc	kg CO_2 eq.	$3,63*10^{-4}$	$1,49*10^{-5}$	$5,32*10^{-5}$	$4,31*10^{-4}$
ODP	kg CFC 11 eq.	$5,54*10^{-7}$	$6,98*10^{-9}$	$1,21*10^{-9}$	$2,62*10^{-7}$
AP	mol H^+ eq.	$3,13*10^{-3}$	$2,23*10^{-4}$	$9,51*10^{-5}$	$3,45*10^{-3}$
	kgSO_2_eq.	$2,67*10^{-3}$	$1,96*10^{-4}$	$8,15*10^{-5}$	$2,95*10^{-3}$
Eutroph. Aq. Freshwater	kg_ P_eq.	$9,72*10^{-5}$	$2,38*10^{-6}$	$1,11*10^{-5}$	$1,11*10^{-4}$
	kg PO_4^3 eq.	$2,98*10^{-4}$	$7,30*10^{-6}$	$3,42*10^{-5}$	$3,40*10^{-4}$
Eutroph. Aq. Marine	kg_ N_eq.	$7,91*10^{-6}$	$2,18*10^{-7}$	$1,59*10^{-6}$	$9,72*10^{-6}$
Eutrophication Terrestrial	mole N_eq.	$6,49*10^{-3}$	$7,99*10^{-4}$	$2,70*10^{-4}$	$7,56*10^{-3}$
POCP	kg NMVOC eq.	$1,87*10^{-3}$	$2,25*10^{-4}$	$9,49*10^{-5}$	$2,19*10^{-3}$
ADP-minerals& metals*	kg Sb eq.	$1,92*10^{-6}$	$1,15*10^{-7}$	$1,06*10^{-7}$	$2,14*10^{-6}$
ADP-fossil*	MJ	6,79	0,563	0,33	7,68
Water Use*	m^3_world eq. depr	0,11	$1,75*10^{-3}$	$1,09*10^{-2}$	0,123
GWP - GHG	kg CO_2 eq.	0,803	$3,73*10^{-2}$	$1,64*10^{-2}$	0,803

Table 21: *Impact indicators for the system Diathonite Acoustix$^+$.*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot. (A1-A3)**
GWP-total	kg CO_2 eq.	$8,23*10^{-1}$	$3,76*10^{-2}$	$3,31*10^{-2}$	$8,94*10^{-1}$
GWP-fossil	kg CO_2 eq.	$7,65*10^{-1}$	$3,73*10^{-2}$	$1,62*10^{-2}$	$8,19*10^{-1}$
GWP-biogenic	kg CO_2 eq.	$5,72*10^{-2}$	$2,58*10^{-4}$	$1,69*10^{-2}$	$7,40*10^{-4}$
GWP-luluc	kg CO_2 eq.	$3,60*10^{-4}$	$1,50*10^{-5}$	$5,32*10^{-5}$	$4,28*10^{-4}$
ODP	kg CFC 11 eq.	$2,35*10^{-7}$	$6,98*10^{-9}$	$1,21*10^{-9}$	$2,43*10^{-7}$
AP	mol H^+ eq.	$2,94*10^{-3}$	$2,25*10^{-4}$	$9,51*10^{-5}$	$3,26*10^{-3}$
	kgSO_2_eq.	$2,51*10^{-3}$	$1,98*10^{-4}$	$8,15*10^{-5}$	$2,79*10^{-3}$
Eutroph. Aq. Freshwater	kg_ P_eq.	$9,22*10^{-5}$	$2,37*10^{-6}$	$1,11*10^{-5}$	$1,06*10^{-4}$
	kg PO_4^3 eq.	$2,83*10^{-4}$	$7,29*10^{-6}$	$3,42*10^{-5}$	$3,24*10^{-4}$
Eutroph. Aq. Marine	kg_ N_eq.	$7,54*10^{-6}$	$2,17*10^{-7}$	$1,59*10^{-6}$	$9,35*10^{-6}$
Eutrophication Terrestrial	mole N_eq.	$6,08*10^{-3}$	$8,05*10^{-4}$	$2,70*10^{-4}$	$7,16*10^{-3}$
POCP	kg NMVOC eq.	$1,76*10^{-3}$	$2,27*10^{-4}$	$9,45*10^{-5}$	$2,08*10^{-3}$
ADP-minerals& metals*	kg Sb eq.	$1,78*10^{-6}$	$1,14*10^{-7}$	$1,06*10^{-7}$	$2,00*10^{-6}$
ADP-fossil*	MJ	6,49	0,564	0,33	7,38
Water Use*	m^3_world eq. depr	0,102	$1,76*10^{-3}$	$1,09*10^{-2}$	0,115
GWP - GHG	kg CO_2 eq.	0,765	$3,73*10^{-2}$	$1,64*10^{-2}$	0,819

Table 22: *Impact indicators for the system Diathonite Deumix⁺.*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot. (A1-A3)**
GWP-total	kg CO_2 eq.	0,917	$3,64*10^{-2}$	$3,32*10^{-2}$	$9,86*10^{-1}$
GWP-fossil	kg CO_2 eq.	0,856	$3,61*10^{-2}$	$1,63*10^{-2}$	$9,08*10^{-1}$
GWP-biogenic	kg CO_2 eq.	$6,09*10^{-2}$	$2,52*10^{-4}$	$1,69*10^{-2}$	$7,81*10^{-2}$
GWP-luluc	kg CO_2 eq.	$3,35*10^{-4}$	$1,45*10^{-5}$	$5,33*10^{-5}$	$4,03*10^{-4}$
ODP	kg CFC 11 eq.	$2,56*10^{-7}$	$6,76*10^{-9}$	$1,21*10^{-9}$	$2,64*10^{-7}$
AP	mol H^+ eq.	$3,19*10^{-3}$	$2,16*10^{-4}$	$9,53*10^{-5}$	$3,50*10^{-3}$
	kgSO_2_eq.	$2,72*10^{-3}$	$1,90*10^{-4}$	$8,17*10^{-5}$	$2,99*10^{-3}$
Eutroph. Aq. Freshwater	kg_ P_eq.	$9,72*10^{-5}$	$2,30*10^{-6}$	$1,12*10^{-5}$	$1,11*10^{-4}$
	kg PO_4^3 eq.	$2,99*10^{-4}$	$7,07*10^{-6}$	$3,42*10^{-5}$	$3,40*10^{-4}$
Eutroph. Aq. Marine	kg_ N_eq.	$7,82*10^{-6}$	$2,11*10^{-7}$	$1,57*10^{-6}$	$9,60*10^{-6}$
Eutrophication Terrestrial	mole N_eq.	$6,62*10^{-3}$	$7,74*10^{-4}$	$2,70*10^{-4}$	$7,66*10^{-3}$
POCP	kg NMVOC eq.	$1,90*10^{-3}$	$2,18*10^{-4}$	$9,50*10^{-5}$	$2,21*10^{-3}$
ADP-minerals& metals*	kg Sb eq.	$1,93*10^{-6}$	$1,12*10^{-7}$	$1,06*10^{-7}$	$2,15*10^{-6}$
ADP-fossil*	MJ	6,94	0,546	0,331	7,82
Water Use*	m^3_world eq. depr	0,110	$1,70*10^{-3}$	$1,10*10^{-2}$	$9,86*10^{-1}$
GWP - GHG	kg CO_2 eq.	0,855	$3,61*10^{-2}$	$1,64*10^{-2}$	0,855

Table 23: *Impact indicators for the system Diathonite Screed.*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot. (A1-A3)**
GWP-total	kg CO_2 eq.	0,685	$3,86*10^{-2}$	$2,80*10^{-2}$	$7,52*10^{-1}$
GWP-fossil	kg CO_2 eq.	0,651	$3,83*10^{-2}$	$1,40*10^{-2}$	$7,03*10^{-1}$
GWP-biogenic	kg CO_2 eq.	$3,38*10^{-2}$	$2,65*10^{-4}$	$1,40*10^{-2}$	$4,80*10^{-4}$
GWP-luluc	kg CO_2 eq.	$2,27*10^{-4}$	$1,55*10^{-5}$	$4,71*10^{-5}$	$2,90*10^{-4}$
ODP	kg CFC 11 eq.	$1,13*10^{-7}$	$7,09*10^{-9}$	$1,09*10^{-9}$	$1,21*10^{-7}$
AP	mol H^+ eq.	$1,99*10^{-3}$	$2,23*10^{-4}$	$2,23*10^{-5}$	$2,30*10^{-3}$
	kgSO_2_eq.	$1,69*10^{-3}$	$1,97*10^{-4}$	$7,06*10^{-5}$	$1,96*10^{-3}$
Eutroph. Aq. Freshwater	kg_ P_eq.	$6,32*10^{-5}$	$2,51*10^{-6}$	$9,26*10^{-6}$	$7,50*10^{-5}$
	kg PO_4^3 eq.	$1,94*10^{-4}$	$7,71*10^{-6}$	$2,84*10^{-5}$	$2,30*10^{-4}$
Eutroph. Aq. Marine	kg_ N_eq.	$5,10*10^{-6}$	$2,28*10^{-7}$	$1,31*10^{-6}$	$6,64*10^{-6}$
Eutrophication Terrestrial	mole N_eq.	$4,10*10^{-3}$	$8,05*10^{-4}$	$2,35*10^{-4}$	$5,14*10^{-3}$
POCP	kg NMVOC eq.	$1,20*10^{-3}$	$2,26*10^{-4}$	$8,28*10^{-5}$	$1,51*10^{-3}$
ADP-minerals& metals*	kg Sb eq.	$1,01*10^{-6}$	$1,21*10^{-7}$	$9,28*10^{-8}$	$1,22*10^{-6}$
ADP-fossil*	MJ	4,83	0,577	0,283	6,55
Water Use*	m^3_world eq. depr	0,057	$1,82*10^{-3}$	$9,38*10^{-3}$	0,068
GWP - GHG	kg CO_2 eq.	0,651	$3,83*10^{-2}$	$1,41*10^{-2}$	0,651

Table 24: *Impact indicators for the system Diathonite Thermactive.037*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot. (A1-A3)**
GWP-total	kg CO_2 eq.	$8,73*10^{-1}$	$4,51*10^{-2}$	$4,54*10^{-2}$	$9,64*10^{-1}$
GWP-fossil	kg CO_2 eq.	$8,05*10^{-1}$	$4,48*10^{-2}$	$2,22*10^{-2}$	$8,73*10^{-1}$
GWP-biogenic	kg CO_2 eq.	$6,72*10^{-2}$	$3,14*10^{-4}$	$2,31*10^{-2}$	$9,06*10^{-2}$
GWP-luluc	kg CO_2 eq.	$3,49*10^{-4}$	$1,79*10^{-5}$	$7,23*10^{-5}$	$4,39*10^{-4}$
ODP	kg CFC 11 eq.	$2,40*10^{-7}$	$8,37*10^{-9}$	$1,64*10^{-9}$	$2,50*10^{-7}$
AP	mol H^+ eq.	$3,36*10^{-3}$	$2,62*10^{-4}$	$1,30*10^{-4}$	$3,75*10^{-3}$
	kgSO_2_eq.	$2,83*10^{-3}$	$2,31*10^{-4}$	$1,11*10^{-4}$	$3,20*10^{-3}$
Eutroph. Aq. Freshwater	kg_ P_eq.	$1,07*10^{-4}$	$2,86*10^{-6}$	$1,53*10^{-5}$	$1,25*10^{-4}$
	kg PO_4^3 eq.	$3,28*10^{-4}$	$8,79*10^{-6}$	$4,69*10^{-5}$	$3,84*10^{-4}$
Eutroph. Aq. Marine	kg_ N_eq.	$8,48*10^{-6}$	$2,63*10^{-7}$	$2,16*10^{-6}$	$1,09*10^{-5}$
Eutrophication Terrestrial	mole N_eq.	$6,60*10^{-3}$	$9,46*10^{-4}$	$3,68*10^{-4}$	$7,91*10^{-3}$
POCP	kg NMVOC eq.	$1,91*10^{-3}$	$2,66*10^{-4}$	$1,29*10^{-4}$	$2,31*10^{-3}$
ADP-minerals& metals*	kg Sb eq.	$1,82*10^{-6}$	$1,41*10^{-7}$	$1,44*10^{-7}$	$2,11*10^{-6}$
ADP-fossil*	MJ	6,86	0,676	0,451	6,69
Water Use*	m^3_world eq. depr	$1,24*10^{-2}$	$2,09*10^{-3}$	$1,49*10^{-2}$	0,141
GWP - GHG	kg CO_2 eq.	0,805	$4,47*10^{-2}$	$2,23*10^{-2}$	0,872

Table 25: *Impact indicators for the system Diathonite Simactive.*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot. (A1-A3)**
GWP-total	kg CO_2 eq.	$8,45*10^{-1}$	$3,80*10^{-2}$	$2,79*10^{-2}$	$9,11*10^{-1}$
GWP-fossil	kg CO_2 eq.	$7,87*10^{-1}$	$3,77*10^{-2}$	$1,40*10^{-2}$	$8,39*10^{-1}$
GWP-biogenic	kg CO_2 eq.	$5,73*10^{-2}$	$2,64*10^{-4}$	$1,38*10^{-4}$	$7,14*10^{-2}$
GWP-luluc	kg CO_2 eq.	$3,17*10^{-4}$	$1,51*10^{-5}$	$4,70*10^{-5}$	$3,79*10^{-4}$
ODP	kg CFC 11 eq.	$2,35*10^{-7}$	$7,06*10^{-9}$	$1,08*10^{-9}$	$2,43*10^{-7}$
AP	mol H^+ eq.	$2,97*10^{-3}$	$2,24*10^{-4}$	$8,21*10^{-5}$	$3,28*10^{-3}$
	kgSO_2_eq.	$2,53*10^{-4}$	$1,97*10^{-4}$	$7,04*10^{-5}$	$2,80*10^{-3}$
Eutroph. Aq. Freshwater	kg_ P_eq.	$9,20*10^{-5}$	$2,41*10^{-6}$	$9,26*10^{-6}$	$1,04*10^{-4}$
	kg PO_4^3 eq.	$2,82*10^{-4}$	$7,40*10^{-6}$	$2,84*10^{-5}$	$3,18*10^{-4}$
Eutroph. Aq. Marine	kg_ N_eq.	$7,43*10^{-6}$	$2,21*10^{-7}$	$1,33*10^{-6}$	$8,98*10^{-6}$
Eutrophication Terrestrial	mole N_eq.	$6,15*10^{-3}$	$8,05*10^{-4}$	$2,34*10^{-4}$	$7,19*10^{-3}$
POCP	kg NMVOC eq.	$1,77*10^{-3}$	$2,27*10^{-4}$	$8,26*10^{-5}$	$1,77*10^{-3}$
ADP-minerals& metals*	kg Sb eq.	$1,79*10^{-6}$	$1,18*10^{-7}$	$9,26*10^{-8}$	$2,00*10^{-6}$
ADP-fossil*	MJ	6,53	0,57	0,283	7,38
Water Use*	m^3_world eq. depr	$1,03*10^{-1}$	$1,77*10^{-3}$	$9,28*10^{-3}$	0,114
GWP - GHG	kg CO_2 eq.	0,787	$3,77*10^{-2}$	$1,42*10^{-2}$	0,839

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

Use of resources

Table 26: *Use of resources for the system Diathonite Evolution.*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A1-A3**
Use of renewable primary energy excluding renewable primary energy resources used as materials	MJ	9,12	$7,75*10^{-3}$	0,729	9,86
Use of renewable primary energy resources used as raw materials	MJ	3,83	$1,27*10^{-3}$	0,598	4,43
Total use of renewable primary energy resources (primary energy and primary energy resources used as materials)	**MJ**	12,95	$8,75*10^{-3}$	1,33	**14,29**
Use of non-renewable primary energy excluding non-renewable primary energy resources used as materials	MJ	7,95	0,611	0,435	9,00
Use of non-renewable primary energy resources used as raw materials	MJ.	$2,30*10^{-4}$	0	$1,14*10^{-4}$	$3,44*10^{-4}$
Total use of non-renewable primary energy resources (primary energy and primary	**MJ**	7,95	0,61	0,435	9,00
Use of secondary materials	kg	0,47	0	0	0,47
Use of renewable secondary fuels	MJ	9,12	$7,75*10^{-3}$	0,729	9,86
Use of non-renewable secondary fuels	MJ	$5,94*10^{-4}$	$2,54*10^{-5}$	$7,26*10^{-5}$	$6,92*10^{-4}$
Net Use of Fresh Water	m^3	$2,39*10^{-3}$	$6,05*10^{-5}$	$3,32*10^{-4}$	$2,78*10^{-3}$

Table 27: *Use of resources for the system Diathonite Acoustix.*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A1-A3**
Use of renewable primary energy excluding renewable primary energy resources used as materials	MJ	9,78	$7,73*10^{-3}$	0,651	8,99
Use of renewable primary energy resources used as raw materials	MJ	4,13	$1,26*10^{-3}$	0,534	4,51
Total use of renewable primary energy resources (primary energy and primary energy resources used as materials)	**MJ**	11,25	$8,74*10^{-3}$	1,19	**13,50**
Use of non-renewable primary energy excluding non-renewable primary energy	MJ	7,52	0,611	0,394	8,84

resources used as materials					
Use of non-renewable primary energy resources used as raw materials	MJ.	$2,30*10^{-4}$	0	$1,03*10^{-4}$	$3,33*10^{-4}$
Total use of non-renewable primary energy resources (primary energy and primary	**MJ**	7,52	0,611	0,394	8,84
Use of secondary materials	kg	0,50	0	0	0,47
Use of renewable secondary fuels	MJ	9,78	$7,73*10^{-3}$	0,651	8,99
Use of non-renewable secondary fuels	MJ	$6,97*10^{-4}$	$2,55*10^{-5}$	$6,50*10^{-5}$	$8,16*10^{-4}$
Net Use of Fresh Water	m^3	$2,71*10^{-3}$	$6,03*10^{-5}$	$2,97*10^{-4}$	$3,27*10^{-3}$

Table 28: *Use of resources for the system Diathonite Acoustix⁺.*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A1-A3**
Use of renewable primary energy excluding renewable primary energy resources used as materials	MJ	8,34	$7,74*10^{-3}$	0,651	10,44
Use of renewable primary energy resources used as raw materials	MJ	3,97	$1,26*10^{-3}$	0,535	4,67
Total use of renewable primary energy resources (primary energy and primary energy resources used as materials)	**MJ**	9,73	$8,74*10^{-3}$	1,19	**15,11**
Use of non-renewable primary energy excluding non-renewable primary energy resources used as materials	MJ	7,84	0,61	0,394	8,52
Use of non-renewable primary energy resources used as raw materials	MJ.	$2,30*10^{-4}$	0	$1,03*10^{-4}$	$3,33*10^{-4}$
Total use of non-renewable primary energy resources (primary energy and primary	**MJ**	7,84	0,61	0,394	8,52
Use of secondary materials	kg	0,47	0	0	0,50
Use of renewable secondary fuels	MJ	8,34	$7,74*10^{-3}$	0,651	10,44
Use of non-renewable secondary fuels	MJ	$7,26*10^{-4}$	$2,54*10^{-5}$	$6,50*10^{-5}$	$7,88*10^{-4}$
Net Use of Fresh Water	m^3	$2,91*10^{-3}$	$6,02*10^{-5}$	$2,97*10^{-4}$	$3,07*10^{-3}$

Table 29: *Use of resources for the system Diathonite Deumix⁺.*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A1-A3**
Use of renewable primary energy excluding renewable primary energy resources used as materials	MJ	9,62	$7,51*10^{-3}$	0,654	10,29
Use of renewable primary energy resources used as raw materials	MJ	3,83	$1,23*10^{-3}$	0,537	4,37
Total use of renewable primary energy resources (primary energy and primary energy resources used as materials)	**MJ**	10,94	$8,74*10^{-3}$	1,19	**14,65**
Use of non-renewable primary energy excluding non-renewable primary energy resources used as materials	MJ	8,00	0,591	0,394	8,98
Use of non-renewable primary energy resources used as raw materials	MJ.	$2,30*10^{-4}$	0	$1,03*10^{-4}$	$3,33*10^{-4}$
Total use of non-renewable primary energy resources (primary energy and primary	**MJ**	8,00	0,59	0,39	8,98
Use of secondary materials	kg	0,45	0	0	0,45
Use of renewable secondary fuels	MJ	9,62	$7,51*10^{-3}$	0,654	10,29
Use of non-renewable secondary fuels	MJ	$6,97*10^{-4}$	$2,46*10^{-5}$	$6,51*10^{-5}$	$7,87*10^{-4}$
Net Use of Fresh Water	m^3	$2,95*10^{-3}$	$5,83*10^{-5}$	$2,99*10^{-4}$	$3,31*10^{-3}$

Table 30: *Use of resources for the system Diathonite Screed.*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A1-A3**
Use of renewable primary energy excluding renewable primary energy resources used as materials	MJ	7,59	$7,76*10^{-3}$	0,595	8,19
Use of renewable primary energy resources used as raw materials	MJ	3,12	$1,30*10^{-3}$	0,49	3,61

Total use of renewable primary energy resources (primary energy and primary energy resources used as materials)	**MJ**	10,71	$9,06*10^{-3}$	1,09	**11,80**
Use of non-renewable primary energy excluding non-renewable primary energy resources used as materials	MJ	5,56	0,624	0,334	6,52
Use of non-renewable primary energy resources used as raw materials	MJ.	$2,31*10^{-4}$	0	$8,43*10^{-5}$	$3,15*10^{-4}$
Total use of non-renewable primary energy resources (primary energy and primary	**MJ**	5,53	0,69	0,40	6,52
Use of secondary materials	kg	0,40	0	0	0,40
Use of renewable secondary fuels	MJ	7,59	$7,76*10^{-3}$	0,595	8,19
Use of non-renewable secondary fuels	MJ	$4,55*10^{-4}$	$2,59*10^{-5}$	$5,72*10^{-5}$	$5,38*10^{-4}$
Net Use of Fresh Water	m^3	$1,68*10^{-3}$	$6,14*10^{-5}$	$2,57*10^{-4}$	$2,00*10^{-3}$

Table 31: *Use of resources for the system Diathonite Thermactive.037*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A1-A3**
Use of renewable primary energy excluding renewable primary energy resources used as materials	MJ	9,58	$9,35*10^{-2}$	0,882	10,47
Use of renewable primary energy resources used as raw materials	MJ	4,05	$1,54*10^{-3}$	0,724	4,78
Total use of renewable primary energy resources (primary energy and primary energy resources used as materials)	**MJ**	10,99	$1,02*10^{-2}$	1,61	**15,24**
Use of non-renewable primary energy excluding non-renewable primary energy resources used as materials	MJ	7,93	0,732	0,53	9,19
Use of non-renewable primary energy resources used as raw materials	MJ.	$2,41*10^{-4}$	0	$1,41*10^{-4}$	$3,82*10^{-4}$
Total use of non-renewable primary energy resources (primary energy and primary	**MJ**	7,93	0,73	0,53	9,19
Use of secondary materials	kg	0,485	0	0	0,48
Use of renewable secondary fuels	MJ	9,58	$9,35*10^{-2}$	0,882	10,47
Use of non-renewable secondary fuels	MJ	$7,19*10^{-4}$	$3,02*10^{-5}$	$8,83*10^{-5}$	$8,38*10^{-4}$
Net Use of Fresh Water	m^3	$3,17*10^{-3}$	$7,22*10^{-5}$	$4,07*10^{-4}$	$3,65*10^{-3}$

Table 32: *Use of resources for the system Diathonite Sismactive.*

Results per declared unit – 1,00 kg					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A1-A3**
Use of renewable primary energy excluding renewable primary energy resources used as materials	MJ	8,92	$7,85*10^{-3}$	0,592	9,52
Use of renewable primary energy resources used as raw materials	MJ	3,78	$1,29*10^{-3}$	0,487	4,27
Total use of renewable primary energy resources (primary energy and primary energy resources used as materials)	**MJ**	10,24	$9,14*10^{-3}$	1,08	**13,78**
Use of non-renewable primary energy excluding non-renewable primary energy resources used as materials	MJ	7,55	0,618	0,334	8,50
Use of non-renewable primary energy resources used as raw materials	MJ.	$2,30*10^{-4}$	0	$8,44*10^{-5}$	$3,14*10^{-4}$
Total use of non-renewable primary energy resources (primary energy and primary	**MJ**	7,55	0,618	0,334	8,50
Use of secondary materials	kg	0,45	0	0	0,45
Use of renewable secondary fuels	MJ	8,92	$7,85*10^{-3}$	0,592	9,52
Use of non-renewable secondary fuels	MJ	$6,51*10^{-4}$	$2,56*10^{-5}$	$5,71*10^{-5}$	$7,34*10^{-4}$
Net Use of Fresh Water	m^3	$1,68*10^{-3}$	$6,14*10^{-5}$	$2,57*10^{-4}$	$3,05*10^{-3}$

Additional Impact Indicators

Table 33: *Additional Impact Indicators for the system Diathonite Evolution.*

Indicator	Unit	A1	A2	A3	Tot. A1-A3
Particulate matter emission	kg_PM2.5_eq.	$3,70*10^{-4}$	$1,83*10^{-5}$	$9,28*10^{-4}$	$1,32*10^{-3}$
Ionizing radiation, human health*	kBq_U235_eq.	$3,77*10^{-2}$	$2,93*10^{-3}$	$2,19*10^{-2}$	$4,28*10^{-2}$
Eco-toxicity (freshwater)**	CTUe	2,66	0,28	0,226	3,16
Human Toxicity, carcinogenic effects**	CTUh	$2,05*10^{-8}$	$2,08*10^{-9}$	$2,44*10^{-9}$	$2,50*10^{-8}$
Human Toxicity, non-carcinogenic effects**	CTUh	$7,19*10^{-8}$	$8,05*10^{-9}$	$4,69*10^{-9}$	$8,46*10^{-8}$
Land Use**	Kg_C_Deficit	3,02	0,155	0,309	3,48

Table 34: *Additional Impact Indicators for the system Diathonite Acoustix.*

Indicator	Unit	A1	A2	A3	Tot. A1-A3
Particulate matter emission	kg_PM2.5_eq.	$4,58*10^{-4}$	$1,83*10^{-5}$	$9,27*10^{-4}$	$1,40*10^{-3}$
Ionizing radiation, human health*	kBq_U235_eq.	$3,91*10^{-2}$	$2,93*10^{-3}$	$1,97*10^{-3}$	$4,40*10^{-2}$
Eco-toxicity (freshwater)**	CTUe	3,24	0,28	0,203	3,72
Human Toxicity, carcinogenic effects**	CTUh	$2,45*10^{-8}$	$2,08*10^{-9}$	$2,18*10^{-9}$	$2,88*10^{-8}$
Human Toxicity, non-carcinogenic effects**	CTUh	$8,63*10^{-8}$	$8,04*10^{-8}$	$4,20*10^{-9}$	$9,95*10^{-8}$
Land Use**	Kg_C_Deficit	3,14	0,155	0,276	3,57

Table 35: *Additional Impact Indicators for the system Diathonite Acoustix^{+}.*

Indicator	Unit	A1	A2	A3	Tot. A1-A3
Particulate matter emission	kg_PM2.5_eq.	$4,20*10^{-4}$	$1,86*10^{-5}$	$9,44*10^{-4}$	$1,38*10^{-3}$
Ionizing radiation, human health*	kBq_U235_eq.	$3,40*10^{-2}$	$2,93*10^{-3}$	$2,27*10^{-3}$	$3,92*10^{-2}$
Eco-toxicity (freshwater)**	CTUe	3,64	0,299	0,274	4,21
Human Toxicity, carcinogenic effects**	CTUh	$1,75*10^{-8}$	$1,09*10^{-9}$	$1,52*10^{-9}$	$2,01*10^{-8}$
Human Toxicity, non-carcinogenic effects**	CTUh	$8,44*10^{-8}$	$8,48*10^{-9}$	$1,10*10^{-8}$	$1,04*10^{-7}$
Land Use**	Kg_C_Deficit	3,24	0,153	0,375	3,77

Table 36: *Additional Impact Indicators for the system Diathonite Deumix^{+}.*

Indicator	Unit	A1	A2	A3	Tot. A1-A3
Particulate matter emission	kg_PM2.5_eq.	$4,58*10^{-4}$	$1,83*10^{-5}$	$9,27*10^{-4}$	$1,40*10^{-3}$
Ionizing radiation, human health*	kBq_U235_eq.	$3,91*10^{-2}$	$2,93*10^{-3}$	$1,97*10^{-3}$	$4,40*10^{-2}$
Eco-toxicity (freshwater)**	CTUe	3,24	0,278	0,203	3,72
Human Toxicity, carcinogenic effects**	CTUh	$2,45*10^{-8}$	$2,08*10^{-9}$	$2,18*10^{-9}$	$2,88*10^{-8}$
Human Toxicity, non-carcinogenic effects**	CTUh	$8,63*10^{-8}$	$8,04*10^{-9}$	$4,20*10^{-9}$	$9,95*10^{-8}$
Land Use**	Kg_C_Deficit	3,14	0,155	0,276	3,57

Table 37: *Additional Impact Indicators for the system Diathonite Screed.*

Indicator	Unit	A1	A2	A3	Tot. A1-A3
Particulate matter emission	kg_PM2.5_eq.	$2,42*10^{-4}$	$1,86*10^{-5}$	$9,25*10^{-4}$	$1,19*10^{-3}$
Ionizing radiation, human health*	kBq_U235_eq.	$3,24*10^{-2}$	$2,95*10^{-3}$	$1,70*10^{-3}$	$3,71*10^{-2}$
Eco-toxicity (freshwater)**	CTUe	1,90	0,286	0,177	2,36
Human Toxicity, carcinogenic effects**	CTUh	$1,57*10^{-8}$	$2,15*10^{-9}$	$1,96*10^{-9}$	$1,98*10^{-8}$
Human Toxicity, non-carcinogenic effects**	CTUh	$5,31*10^{-8}$	$8,26*10^{-9}$	$3,67*10^{-9}$	$6,50*10^{-8}$
Land Use**	Kg_C_Deficit	2,54	0,156	0,252	2,95

Table 38: *Additional Impact Indicators for the system DiathoniteThermactive.037*

Indicator	Unit	A1	A2	A3	Tot. A1-A3
Particulate matter emission	kg_PM2.5_eq.	$5{,}41*10^{-4}$	$2{,}16*10^{-5}$	$9{,}31*10^{-4}$	$1{,}49*10^{-3}$
Ionizing radiation, human health*	kBq_U235_eq.	$3{,}82*10^{-2}$	$3{,}52*10^{-3}$	$2{,}68*10^{-3}$	$4{,}44*10^{-2}$
Eco-toxicity (freshwater)**	CTUe	3,23	0,335	0,276	3,84
Human Toxicity, carcinogenic effects**	CTUh	$2{,}38*10^{-8}$	$2{,}51*10^{-9}$	$2{,}95*10^{-9}$	$2{,}93*10^{-8}$
Human Toxicity, non-carcinogenic effects**	CTUh	$9{,}26*10^{-8}$	$9{,}66*10^{-9}$	$5{,}71*10^{-9}$	$1{,}08*10^{-7}$
Land Use**	Kg_C_Deficit	3,24	0,183	0,373	3,80

Table 39: *Additional Impact Indicators for the system Diathonite Sismactive*

Indicator	Unit	A1	A2	A3	Tot. A1-A3
Particulate matter emission	kg_PM2.5_eq.	$4{,}30*10^{-4}$	$1{,}84*10^{-5}$	$9{,}25*10^{-4}$	$1{,}37*10^{-3}$
Ionizing radiation, human health*	kBq_U235_eq.	$3{,}81*10^{-2}$	$2{,}97*10^{-3}$	$1{,}69*10^{-3}$	$4{,}28*10^{-2}$
Eco-toxicity (freshwater)**	CTUe	3,04	0,281	0,177	3,50
Human Toxicity, carcinogenic effects**	CTUh	$2{,}31*10^{-8}$	$2{,}11*10^{-9}$	$1{,}96*10^{-9}$	$2{,}72*10^{-8}$
Human Toxicity, non-carcinogenic effects**	CTUh	$8{,}14*10^{-8}$	$8{,}14*10^{-9}$	$3{,}67*10^{-9}$	$9{,}32*10^{-8}$
Land Use**	Kg_C_Deficit	3,01	0,156	0,251	3,42

(*) Disclaimer: This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.
(**) Disclaimer: the results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

Waste production and output flows

Waste production

Table 40: *Flows in final products for Diathonite Evolution.*

Results per declared unit		
Indicator	**Unit**	**Tot. (A1-A3)**
Hazardous waste disposed	kg	$3{,}64*10^{-4}$
Non-hazardous waste disposed	kg	$2{,}37*10^{-5}$
Radioactive waste disposed	kg	0

Table 41: *Flows in final products for Diathonite Acoustix.*

Results per declared unit		
Indicator	**Unit**	**Tot. (A1-A3)**
Hazardous waste disposed	kg	$3{,}72*10^{-4}$
Non-hazardous waste disposed	kg	$2{,}44*10^{-5}$
Radioactive waste disposed	kg	0

Table 42: *Flows in final products for Diathonite Acoustix^{+}.*

Results per declared unit		
Indicator	**Unit**	**Tot. (A1-A3)**
Hazardous waste disposed	kg	$3{,}64*10^{-4}$
Non-hazardous waste disposed	kg	$2{,}36*10^{-5}$
Radioactive waste disposed	kg	0

Table 43: *Flows in final products for Diathonite Deumix^{+}.*

Results per declared unit		
Indicator	**Unit**	**Tot. (A1-A3)**
Hazardous waste disposed	kg	$3{,}19*10^{-4}$

Non-hazardous waste disposed	kg	$2,58*10^{-5}$
Radioactive waste disposed	kg	0

Table 44: *Flows in final products for Diathonite Screed.*

Results per declared unit		
Indicator	**Unit**	**Tot. (A1-A3)**
Hazardous waste disposed	kg	$3,19*10^{-4}$
Non-hazardous waste disposed	kg	$2,32*10^{-5}$
Radioactive waste disposed	kg	0

Table 45: *Flows in final products for Diathonite Thermactive.037*

Results per declared unit		
Indicator	**Unit**	**Tot. (A1-A3)**
Hazardous waste disposed	kg	$3,79*10^{-4}$
Non-hazardous waste disposed	kg	$2,32*10^{-5}$
Radioactive waste disposed	kg	0

Table 46: *Flows in final products for Diathonite Sismactive.*

Results per declared unit		
Indicator	**Unit**	**Tot. (A1-A3)**
Hazardous waste disposed	kg	$3,76*10^{-4}$
Non-hazardous waste disposed	kg	$2,42*10^{-5}$
Radioactive waste disposed	kg	0

Output flows

Table 47: *Use of resources for the systems of the Diathonite Family (Evolution, Acoustix, Acoustix^{+}, Deumix^{+}, Massetto, Thermactive.037 and Sismactive).*

Results per declared unit					
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot. A1-A3**
Components for re-use	kg	0	0	0	0
Material for recycling	kg	0	0	0	0
Materials for energy recovery	kg	0	0	0	0
Exported energy, electricity	MJ	0	0	0	0
Exported energy, thermal	MJ	0	0	0	0

NOTE: It has to be specified that Diasen claimed: at the end of the service life of any product dealt with in this document, the products themselves can potentially recycled as inert materials;

Information on biogenic carbon content

Table 48:*Biogenic carbon content for the products Diathonite Evolution, Acoustix ed Acoustix^{+}.*

Biogenic Carbon	Unit	Diathonite Evolution	Diathonite Acoustix	Diathonite Acoustix^{+}
Biogenic carbon in the product	Kg C	$1,43*10^{-2}$	$1,43*10^{-2}$	$2,54*10^{-3}$
Biogenic carbon in the packaging	Kg C	$7,17*10^{-2}$	$6,52*10^{-2}$	$5,98*10^{-4}$

Table 49*: Biogenic carbon content for the products Diathonite Deumix^{+}, Massetto, Thermactive.037 e Sismactive.*

Biogenic Carbon	Unit	Diathonite Deumix^{+}	Diathonite Massetto	Diathonite Thermactive.037	Diathonite Sismactive
Biogenic carbon in the product	Kg C	$6,45*10^{-3}$	$5,75*10^{-3}$	$6,89*10^{-3}$	$6,45*10^{-3}$
Biogenic carbon in the packaging	Kg C	$6,32*10^{-2}$	$5,27*10^{-2}$	$6,52*10^{-2}$	$5,43*10^{-4}$

Differences versus previous versions

Update of the Ecoinvent database and of the fuel mix.

Additional information

- The company Diasen is certificated ISO 9001, ISO 14001. Moreover a wide amount of its product obtained other specific certification, as Avis Technique (French lab CSTB) and ITF for Sport Flooring system. It is associated to A.N.I.T (Associazione Nazionale Isolamento Termo-Acustico), to the Green Building Council Italia and N.R.C.A - National Roofing Contractors Association.

- The Product of the Diathonite family contains recycled pre-consumer materials (table 17). At the end of their life these ones can be recycled as inert materials.

References

[1] General Programme Instructions For The International EPD® System - Version 3.01 2019-09-18;
[2] Product Category Rules (PCR) - Construction Products PCR 2019:14 - Version 1.1;
[3] ISO 14040:2006 - Environmental Management – Life cycle assessment – Principles and framework;
[4] ISO 14044:2006 - Environmental Management – Life cycle assessment – Requirements and guidelines;
[5] ISO 15804:2019 - Sustainability of construction works – Environmental product declarations - Core rules for the product category of construction products;
[6] ISO 15942:2011 - Sustainability of construction works — Environmental product declarations — Communication format business-to-business;
[7] Website: https://www.enel.it/content/dam/enel-it/documenti-supporto/mercatolibero-luce/Tabella%20Mix%20Energetico%20Enel%20Energia.pdf;
[8] Association of Issuing Bodies, *"European Residual Mixes Results of the calculation of Residual Mixes for the calendar year 2019".*Version 1.0, 2020-05-29;
[9] L. Dalhgren, H. Stripple, *"A comparative Study of Various Concept for Shopping Bags and Cements Sacks".* Study commissioned by BillerudKorsnäs AB. IVL Swedish Environmental Research Institute 2016. Report Number: U5732;
[10] Ullmann's Encyclopaedia of Industrial Chemistry (2010). John Wiley & Sons, Inc., Hoboken, USA;
[11] R. Petrucci, "Analisi Del Ciclo Di Vita (LCA) Inerente Alla Produzone Di Intonaci E Massetti Da Parte Del Cliente - Serie Diathonite, Argacem E Aragtherm". Università di Perugia - Report - Maggio 2022);

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

EPD®

www.environdec.com