

Environmental Product Declaration



In accordance with ISO 14025 and EN 15804:2012+A2:2019/AC:2021 for:

DESSO Evolve

from

TARKETT



| | |
|--------------------------|---|
| Programme: | The International EPD® System, www.environdec.com |
| Programme operator: | EPD International AB |
| EPD registration number: | EPD-IES-0026337:001 |
| Version date: | 2026-01-22 |
| Validity date: | 2031-01-22 |

An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com.



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: | support@environdec.com |

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|--|
| CEN standard EN 15804 serves as the Core Product Category Rules (PCR) |
| Product category rules (PCR): <i>PCR 2019:14 version 2.0.1 and c-PCR-004 Resilient, textile and laminate floor coverings (EN 16810)</i> |
| PCR review was conducted by: <i>The Technical Committee of the International EPD® System lead by Rob Rouwette (chair) and Noa Meron (co-chair). A full list of members available on www.environdec.com. The review panel may be contacted via supportii@environdec.com</i> |
| Independent third-party verification of the declaration and data, according to ISO 14025:2006: <input type="checkbox"/> EPD process certification <input checked="" type="checkbox"/> EPD verification |
| Third party verifier: <i>Damien Prunel from LCIE Bureau Veritas</i> |
| Procedure for follow-up of data during EPD validity involves third party verifier: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

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

EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit version number) or be based on fully aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD: Tarkett

Contact: Sandy Bentmim (sandy.bentmim@tarkett.com)

Description of the organisation:

With an international coverage and a wide range of products, Tarkett has over 130 years of experience in providing integrated solutions for floorings to professionals and end users. Many of the most important architectural firms in the world and building professionals have chosen Tarkett for the value of its products and for its consultation and service abilities. Therefore, Tarkett floorings and sport surfaces are present in several prestigious architectural reference points. Tarkett offers integrated solutions for floorings, able to meet the particular needs of customers. Our wide range of designs, colours and models provides an infinite series of possibilities, contributing to create a positive environment and a better quality of life for people.

Tarkett operates with the utmost respect for the environment towards the realization of eco-friendly products.

Tarkett's commitment to the environment is woven throughout its business. Cradle-to-Cradle principles are, in fact, the basis of the design and production of every solution. Particularly, the lifecycle analysis is used to continuously improve the production process, and so the products until their use stage, disposal and recycling. The development of products that can be reused within internal production cycles, or external ones in case of other individuals, has been an integral part of the business strategy aimed at sustainability for many years. The WCM (World Class Manufacturing) management system has been developed in 2009, and it includes the environmental pillar aimed to the elimination of losses and to the growth of process efficiency.

Product-related or management system-related certifications: ISO 14001, ISO 45001, WCM manufacturing site

Name and location of production site(s): Dendermonde (Belgium) and Waalwijk (Netherlands)

Product information

Product name: DESSO Evolve

Product identification: Carpet tiles with a 100% recyclable DESSO EcoBase®¹ backing and a 100% regenerated solution dyed Nylon yarn (Econyl)

Product description: Loose-lay carpet tiles (EN 1307) with DESSO EcoBase® backing developed by Tarkett. The service lifetime recommended by Tarkett is 10 years.

UN CPC code: 2223Z

LCA information

Functional unit / declared unit: 1m² of floor covering with a reference service life (RSL) of 1 year for specified characteristics application and use areas according to ISO 1307 and EN ISO 10874.

Reference service life: 1 year

Time representativeness: 2022

¹ Assured by Lloyds Register

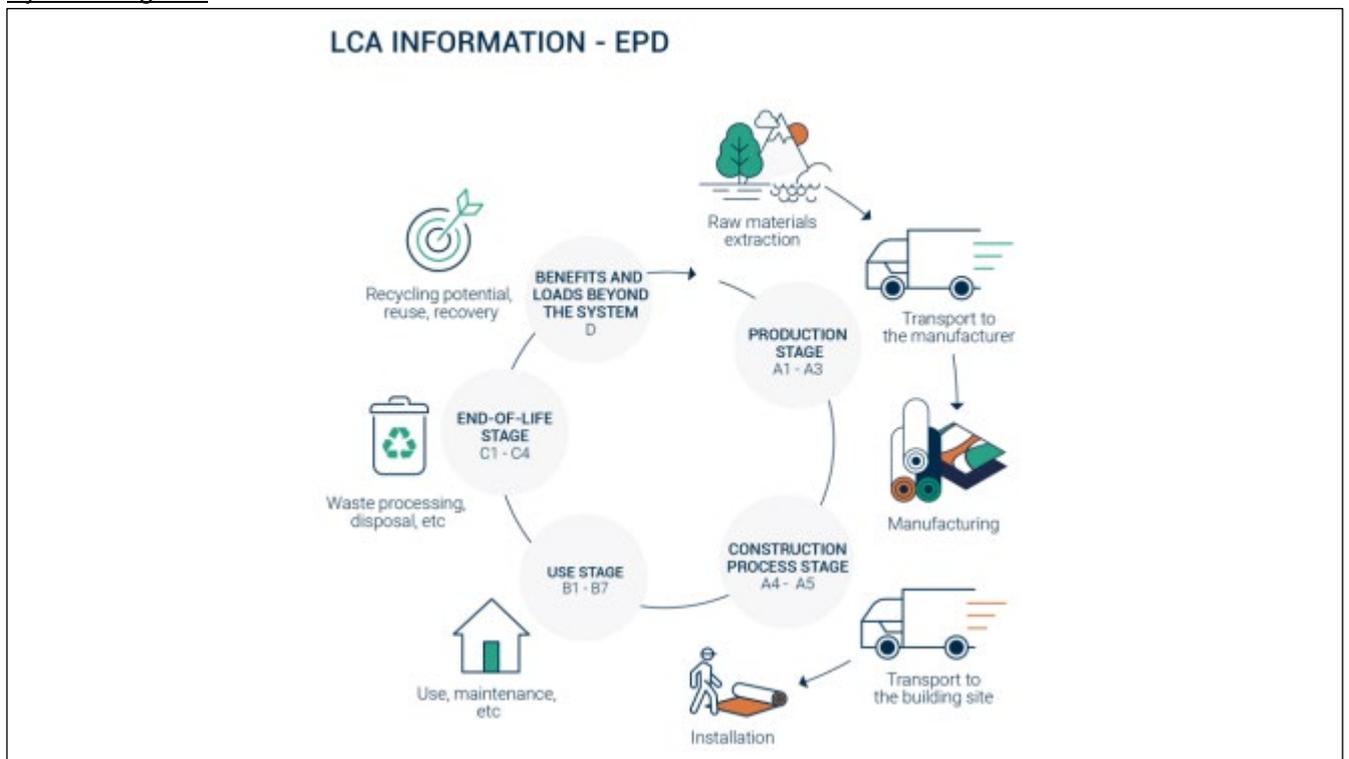
Data quality

Primary data for manufacturing processes were collected for the full calendar year 2022. This one-year period is representative of typical production and complies with the requirements of EN 15941. The data quality assessment covers temporal, geographical, and technological representativeness, and follows the Product Environmental Footprint (PEF) method. This assessment covers data that together contribute to at least 80% of the results of each of the declared environmental impact indicators. The quality level of the relevant data (both specific and generic) can be categorized as Good. The relevant data assessed did not include any other data of the Bad or Very Bad level.

Database(s) and LCA software used: Ecoinvent 3.10, Simapro 9.6.0.1, EN 15804 reference package based on EF 3.1

Description of system boundaries: Cradle to grave and module D (A + B + C + D)

System diagram:



More information: The products are classified in accordance with EN ISO 10874, (previously EN 685) and in reference to the FCSS (Floor Covering Standard Symbols) to be used in all professional areas which require class 33 or less.

Modules declared, geographical scope, share of specific data (in GWP-GHG indicator) and data variation:

| | 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 | X | X | ND | X | ND | ND | ND | ND | ND | X | X | X | X | X |
| Geography | European technology and process coverage | | | | | | | | | | | | | | | | European |
| Specific data used | 28% | 5% | 19% | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Variation – products | 0% | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Variation – sites | 0% | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| Process | Source type | Source | Reference year | Data category | Share of primary data, of GWP-GHG Results for A1-A3 |
|--|----------------|---------------------|----------------|------------------------------|---|
| Raw material production | Collected data | Ecoinvent 3.10 | 2022 | Primary data, Secondary data | 3% |
| Raw material production | EPD | EPD-IES-0008203:001 | 2023 | Primary data, Secondary data | 25% |
| Transportation raw materials | Database | Ecoinvent 3.10 | 2022 | Primary data | 5% |
| Manufacturing of product | Database | Ecoinvent 3.10 | 2022 | Primary data | 19% |
| Total share of primary data, of GWP-GHG results for A1-A3 | | | | | 52% |

Content information

| Characteristics | Yarn Weight [kg/m ²] | Product Weight [kg/m ²] | Product Thickness [mm] |
|-----------------|----------------------------------|-------------------------------------|------------------------|
| Evolve | 5.50E-01 | 3.90E+00 | 6.50E+00 |

Chemical composition for above mentioned product is presented in the following table:

| Product components | Weight [%] | Post-consumer material, weight-% | Renewable material, weight-% |
|-------------------------------|------------|----------------------------------|------------------------------|
| Non-woven (PET/PP) | 4 | 0 | 0 |
| Yarn PA6 (100% recycled)* | 14 | 50 | 0 |
| SBR-compound | 6 | 0 | 0 |
| Aluminium trihydrate | 15 | 0 | 0 |
| Primary chalk | 4 | 0 | 0 |
| Glass scrim | 1 | 0 | 0 |
| EcoBase (w. recycled chalk)** | 56 | 0 | 9 |
| Packaging materials | Weight, kg | Weight-% (versus the product) | |
| Cardboard box | 1.09E-01 | 3 | |
| Wooden pallet | 1.00E-01 | 3 | |

* The yarn is manufactured from 50% pre-consumer and 50% post-consumer materials. The environmental impact of the yarn is based on the EPD-IES-0008203:001 compliant to EN 15804+A2.

** EcoBase contains up to 82% pre-consumer recycled chalk.

Material Health

DESSO Evolve is C2C-Silver certified.

Raw materials are assessed against 'Material Health' criteria as defined by the C2C product certification standard v3.1 and the C2C Material Health Assessment methodology (see www.c2ccertified.org).

Recycled content (third-party verified)

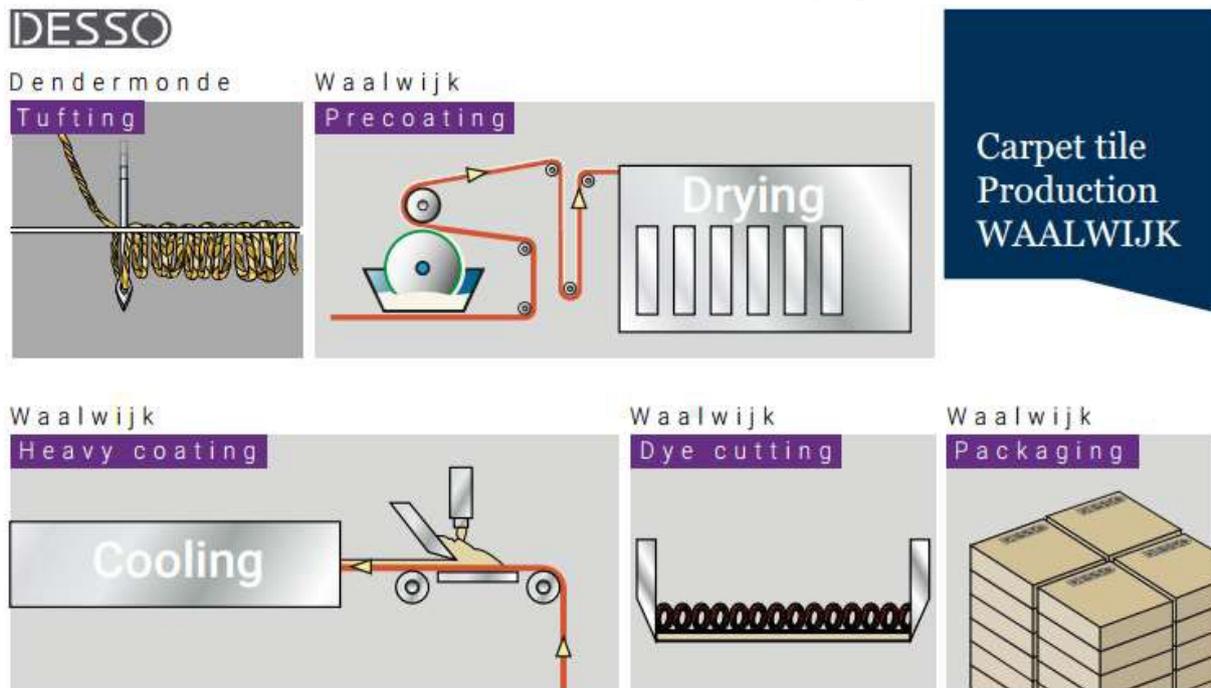
DESSO Evolve contains up to 65.4% recycled and bio-based content². The product is delivered with the Cradle to Cradle® Gold-certified DESSO EcoBase® backing, which is 100% recyclable³ and designed with 100% positively defined⁴ ingredients. This includes chalk upcycled from the Dutch drinking water industry and pine rosin, a by-product of the Scandinavian paper industry.

The product is made with ECONYL yarn which is a 100% regenerated nylon upcycled from post-consumer carpet yarn and discarded fishing nets.

Product manufacturing

Production process

The production of carpet tiles is presented in the following figure:



Renewable energy

Our carpet tiles are produced with energy from 100% renewable sources. The electricity is coming from renewable sources with Guarantees of Origin⁵

² This includes on average 5% bio-based content based on the total product weight. The recycled content is assured by Lloyds

³ Assured by Lloyds Register

⁴ Positively defined means all ingredients have been assessed as either Green (optimal) or Yellow (tolerable) according to the Cradle to Cradle® assessment criteria. As described in Cradle to Cradle® Certified Product Standard Version 3.1

⁵ A mix of mainly wind and a small part of solar and hydro energy reflecting 0,04kgCO₂eq/kWh

Production waste

| Waste type | Evolve |
|---|----------|
| Non-hazardous waste to incineration in the cement industry [kg/m ²] | 2.29E-01 |
| Non-hazardous wastewater to external treatment [kg/m ²] | 2.63E-02 |

Delivery and installation

Delivery

The average distribution distance between the factories and the installation site is presented in the following table. The distribution is made by truck.

| | Evolve |
|-----------------------------------|----------|
| Average distance of delivery [km] | 7.00E+02 |

Installation

Carpet flooring do not use any electric tools for their installation. If a cut is necessary, it could be done with a manual tool.

Waste

During the installation approximately 3% of the flooring is lost as off-cuts. All flooring losses are sent to incineration.

Packaging

50% of the packaging materials goes to incineration and 50% goes to landfill except for wooden pallet which are recycled.

Use Stage

Reference Service Life (RSL)

For these products, the stated RSL is 1 year. It should be noted, however, that the service life of a carpet flooring may vary depending on the amount and nature of floor traffic and the type and frequency of maintenance. The manufacturer has provided this service life on the basis of his experience of flooring manufacture and supply. This RSL is applicable as long as the product use complies with that defined by ISO 14041 and ISO 10874 in accordance with the product's classification. The service lifetime recommended by Tarkett is 10 years.

Cleaning and maintenance

The maintenance step concerns the cleaning of the floor. Tarkett has provided the recommended maintenance routine for the product throughout the reference life. Water, detergent and electricity consumption of the cleaning machine are considered in the LCA study:

- Common maintenance: 2 times / week
- Periodical maintenance: 2 times / year

| Description | Amount | Unit |
|-------------------------|----------|-------------------------|
| Electricity consumption | 4.42E-01 | kWh/year/m ² |
| Water consumption | 5.70E-02 | L/year/m ² |
| Detergent consumption | 3.00E-03 | L/year/m ² |

Prevention of structural damage

To avoid excessive wear, usage should be restricted to the stated areas of application as outlined by the norm ISO 10874.

End of Life

Our circular approach to carpet tiles enables us to reduce the emission of greenhouse gases like carbon dioxide, a major contributor to global warming. Tarkett has implemented a take-back and recycling program called ReStart⁶. Via Tarkett's Sales Network and with the help of logistic partners, post-use carpet tiles are collected and returned to Tarkett's carpet recycling centre in Waalwijk, the Netherlands⁷. DESSO's EcoBase products have been designed with disassembly and recycling in mind, which allows for recovery of yarn and backing materials in a closed-cycle and without loss of quality. The recycling process⁸ is developed by Tarkett and unique in the market.

The only carpet tile manufacturer with a closed-loop recycling system, we limit the use of virgin raw materials for new products, and avoid common, carbon-emitting options such as incineration and the landfill at product end-of-life.

The end-of-life scenario in this EPD is based on recycling of yarn and heavy coating, representing approximately 75% of the total product. The remaining 25% is sent to the cement-industry for co-processing.

⁶ https://professionals.tarkett.com/en_EU/node/restart-recycling-take-back-programme-9721

⁷ https://professionals.tarkett.com/en_EU/node/recycling-carpet-tile-materials-closing-loop-10207

⁸ Recyclability has been verified by Lloyds Register.

Transport

Carpets are recycled in the same factory where they are produced. So, the distance of transport between installation sites and recycling site is the same as for the module A4 (average delivery distance to customer).

| | Evolve |
|--|----------|
| Transport distance to Tarkett's carpet recycling centre [km] | 7.00E+02 |

Waste processing

Basically, the process separates yarn and EcoBase® backing and makes these main material streams available for the next carpet cycle, without loss of value and/or material properties (closed-loop recycling).

A small rest stream (mainly tuft cloth and SBR-compound) cannot be reused yet at the desired quality level. At this moment in time those streams will be considered as fuels and raw material (ATH) for the cement industry, until other outlets will be found.

Resource recovery

Module D has been considered for this study in order to evaluate the possible environmental benefits obtainable through the re-use of secondary materials in other production cycles. Particularly, the module clearly describes the benefits and the environmental charges deriving from reusable products exiting from the system, such as secondary materials or secondary fuels.

Three outlets have been considered:

- Yarn
- DESSO EcoBase® backing
- Others compounds

PA6 yarn will be sent back to Tarkett's yarn supplier Aquafil for depolymerization and reuse in new carpet yarns. This post-use material stream can be used for 100% and without quality loss for the production of new carpet yarns.

DESSO EcoBase® backing is 100% recyclable in Tarkett's own production process. Post-use material can be directly recovered in Tarkett's production for the same purpose and avoids the production and use of primary material.

A small rest fraction is recycled in the cement industry. The ATH content substitutes primary chalk, which is a raw material for the production of cement. Organic residues substitute primary fuel for processing.

Interpretation of results

The environmental impact of DESSO EcoBase products should be considered over the whole life cycle and beyond, including all module A-D. DESSO EcoBase consists of a novel recipe, specially designed to enable post-consumer recycling on a high level, which means, for the same purpose and without quality loss.

The original EcoBase backing was introduced in 2010. Because of the relatively long service lifetime (10 years), the majority of current products are still in their first cycle, meaning that recycled content is still very minimal and not included in the calculations.

Environmental Information

Potential environmental impact

| Results per functional or declared unit - (End of Life -> Recycling) | | | | | | | | | | | | | | | | |
|--|--|-----------|----------|----------|----|----------|----|----|----|----|----|----------|----------|----------|----------|-----------|
| Indicator | Unit | A1-A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
| GWP-total | kg CO2 eq | 3.83E+00 | 1.35E-01 | 3.52E-01 | ND | 1.48E-01 | ND | ND | ND | ND | ND | 0.00E+00 | 1.36E-01 | 7.02E-01 | 8.23E-01 | -4.76E+00 |
| GWP-fossil | kg CO2 eq | 4.38E+00 | 1.35E-01 | 2.85E-01 | ND | 1.46E-01 | ND | ND | ND | ND | ND | 0.00E+00 | 1.36E-01 | 1.24E-01 | 8.23E-01 | -4.78E+00 |
| GWP-biogenic | kg CO2 eq | -5.61E-01 | 2.42E-05 | 6.68E-02 | ND | 3.67E-04 | ND | ND | ND | ND | ND | 0.00E+00 | 2.43E-05 | 5.77E-01 | 5.21E-05 | 1.76E-02 |
| GWP- Luluc | kg CO2 eq | 6.18E-03 | 4.44E-05 | 1.93E-04 | ND | 6.84E-04 | ND | ND | ND | ND | ND | 0.00E+00 | 4.44E-05 | 1.22E-04 | 5.35E-06 | -3.76E-03 |
| ODP | kg CFC11 eq | 1.28E-06 | 2.68E-09 | 3.86E-08 | ND | 2.57E-09 | ND | ND | ND | ND | ND | 0.00E+00 | 2.69E-09 | 2.69E-09 | 3.04E-10 | -3.69E-08 |
| AP | mol H+ eq | 1.95E-02 | 4.17E-04 | 6.72E-04 | ND | 7.51E-04 | ND | ND | ND | ND | ND | 0.00E+00 | 4.24E-04 | 9.07E-04 | 1.88E-04 | -1.11E-02 |
| EP-freshwater | kg P eq | 1.01E-03 | 9.03E-06 | 3.22E-05 | ND | 1.29E-04 | ND | ND | ND | ND | ND | 0.00E+00 | 9.04E-06 | 6.47E-05 | 2.59E-06 | -4.99E-04 |
| EP-marine | kg N eq | 4.84E-03 | 1.39E-04 | 2.52E-04 | ND | 1.35E-04 | ND | ND | ND | ND | ND | 0.00E+00 | 1.43E-04 | 1.50E-04 | 1.07E-04 | -1.38E-03 |
| EP-terrestrial | mol N eq | 3.24E-02 | 1.52E-03 | 1.31E-03 | ND | 1.15E-03 | ND | ND | ND | ND | ND | 0.00E+00 | 1.55E-03 | 1.40E-03 | 9.10E-04 | -1.80E-02 |
| POCP | kg NMVOC eq | 1.85E-02 | 6.54E-04 | 6.86E-04 | ND | 3.80E-04 | ND | ND | ND | ND | ND | 0.00E+00 | 6.64E-04 | 4.85E-04 | 2.29E-04 | -9.70E-03 |
| ADP- minerals&metals* | kg Sb eq | 3.21E-05 | 4.44E-07 | 1.01E-06 | ND | 3.58E-07 | ND | ND | ND | ND | ND | 0.00E+00 | 4.44E-07 | 6.60E-06 | 5.94E-08 | -1.44E-05 |
| ADP-fossil* | MJ | 8.07E+01 | 1.90E+00 | 2.63E+00 | ND | 3.42E+00 | ND | ND | ND | ND | ND | 0.00E+00 | 1.90E+00 | 1.20E+00 | 1.61E+01 | -1.06E+02 |
| WDP | m3 depriv. | 3.83E+00 | 7.90E-03 | 1.12E-01 | ND | 4.16E-02 | ND | ND | ND | ND | ND | 0.00E+00 | 7.90E-03 | 5.46E-02 | 2.67E-02 | 4.41E+00 |
| PM* | disease inc. | 1.71E-07 | 1.05E-08 | 6.34E-09 | ND | 2.76E-09 | ND | ND | ND | ND | ND | 0.00E+00 | 1.06E-08 | 9.82E-09 | 9.68E-10 | -1.26E-07 |
| RP* | kg U-235 eq | 2.86E-01 | 2.44E-03 | 9.19E-03 | ND | 9.49E-02 | ND | ND | ND | ND | ND | 0.00E+00 | 2.44E-03 | 4.56E-03 | 2.94E-04 | -1.15E-01 |
| ETP-fw* | CTUe | 1.55E+01 | 5.10E-01 | 3.12E+00 | ND | 4.82E-01 | ND | ND | ND | ND | ND | 0.00E+00 | 5.11E-01 | 2.66E+00 | 1.65E+00 | -1.24E+01 |
| HTP-c* | CTUe | 1.32E-08 | 9.46E-10 | 5.13E-10 | ND | 3.08E-10 | ND | ND | ND | ND | ND | 0.00E+00 | 9.47E-10 | 4.09E-09 | 1.69E-10 | -1.82E-08 |
| HTP-nc* | CTUe | 3.99E-08 | 1.18E-09 | 2.07E-09 | ND | 1.19E-09 | ND | ND | ND | ND | ND | 0.00E+00 | 1.19E-09 | 5.96E-09 | 2.46E-09 | -1.90E-08 |
| SQP* | dimensionless | 9.22E+01 | 1.13E+00 | 2.91E+00 | ND | 6.31E-01 | ND | ND | ND | ND | ND | 0.00E+00 | 1.13E+00 | 5.42E+00 | 4.52E-02 | -5.10E+00 |
| Acronyms | 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; PM = Potential incidence of disease due to PM emissions; RP = Potential Human exposure efficiency relative to U235; ETP-fw = Potential Comparative Toxic Unit for ecosystems; HTP-c = Potential Comparative Toxic Unit for humans; HTP-nc = Potential Comparative Toxic Unit for humans; SQP = Potential soil quality index | | | | | | | | | | | | | | | |

* Disclaimer: 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.

Use of resources

| Results per functional or declared unit - (End of Life -> Recycling) | | | | | | | | | | | | | | | | |
|--|---|----------|----------|-----------|----|----------|----|----|----|----|----|----------|----------|----------|----------|-----------|
| Indicator | Unit | A1-A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
| PERE | MJ, net CV | 3.73E+01 | 3.22E-02 | 2.71E+00 | ND | 8.11E-01 | ND | ND | ND | ND | ND | 0.00E+00 | 3.23E-02 | 1.81E+01 | 6.41E-03 | 1.33E+01 |
| PERM | MJ, net CV | 3.62E+00 | 0.00E+00 | -1.47E+00 | ND | 4.50E-03 | ND | ND | ND | ND | ND | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| PERT | MJ, net CV | 4.09E+01 | 3.22E-02 | 1.23E+00 | ND | 8.11E-01 | ND | ND | ND | ND | ND | 0.00E+00 | 3.23E-02 | 1.81E+01 | 6.41E-03 | 1.33E+01 |
| PENRE | MJ, net CV | 5.56E+01 | 1.90E+00 | 1.88E+00 | ND | 3.42E+00 | ND | ND | ND | ND | ND | 0.00E+00 | 1.90E+00 | 1.20E+00 | 1.61E+01 | -8.88E+01 |
| PENRM | MJ, net CV | 4.31E+01 | 0.00E+00 | 1.29E+00 | ND | 2.53E-02 | ND | ND | ND | ND | ND | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.08E+01 |
| PENRT | MJ, net CV | 9.87E+01 | 1.90E+00 | 3.17E+00 | ND | 3.42E+00 | ND | ND | ND | ND | ND | 0.00E+00 | 1.90E+00 | 1.20E+00 | 1.61E+01 | -7.79E+01 |
| SM | kg | 2.49E+00 | 0.00E+00 | 7.48E-02 | ND | 0.00E+00 | ND | ND | ND | ND | ND | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | -8.89E-01 |
| RSF | MJ, net CV | 0.00E+00 | 0.00E+00 | 0.00E+00 | ND | 0.00E+00 | ND | ND | ND | ND | ND | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | -7.37E-25 |
| NRSF | MJ, net CV | 0.00E+00 | 0.00E+00 | 0.00E+00 | ND | 0.00E+00 | ND | ND | ND | ND | ND | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | -8.69E-24 |
| FW | m3 | 9.18E-02 | 2.60E-04 | 2.76E-03 | ND | 2.90E-03 | ND | ND | ND | ND | ND | 0.00E+00 | 2.61E-04 | 1.43E-03 | 9.30E-04 | 9.02E-02 |
| Acronyms | PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water | | | | | | | | | | | | | | | |

Waste production and output flows

| Results per functional or declared unit - (End of Life -> Recycling) | | | | | | | | | | | | | | | | |
|--|------|----------|----------|----------|----|----------|----|----|----|----|----|----------|----------|----------|----------|-----------|
| Indicator | Unit | A1-A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
| Hazardous waste disposed | kg | 9.52E-03 | 5.75E-05 | 2.69E-03 | ND | 1.18E-04 | ND | ND | ND | ND | ND | 0.00E+00 | 5.75E-05 | 9.98E-04 | 1.25E-02 | -6.57E-04 |
| Non-hazardous waste disposed | kg | 2.45E+00 | 1.11E-01 | 2.18E-01 | ND | 4.30E-02 | ND | ND | ND | ND | ND | 0.00E+00 | 1.11E-01 | 3.51E-01 | 1.59E-02 | -1.13E+00 |
| Radioactive waste disposed | kg | 1.58E-04 | 6.09E-07 | 4.90E-06 | ND | 2.44E-05 | ND | ND | ND | ND | ND | 0.00E+00 | 6.06E-07 | 1.15E-06 | 7.46E-08 | -5.79E-04 |
| Components for re-use | kg | 0.00E+00 | 0.00E+00 | 0.00E+00 | ND | 0.00E+00 | ND | ND | ND | ND | ND | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Material for recycling | kg | 3.16E-01 | 0.00E+00 | 1.09E-01 | ND | 0.00E+00 | ND | ND | ND | ND | ND | 0.00E+00 | 0.00E+00 | 2.82E+00 | 7.35E-01 | 1.91E-01 |
| Materials for energy recovery | kg | 8.47E-02 | 0.00E+00 | 1.20E-01 | ND | 0.00E+00 | ND | ND | ND | ND | ND | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.46E-01 | 0.00E+00 |
| Exported energy, electricity | MJ | 1.71E+00 | 0.00E+00 | 5.14E-02 | ND | 0.00E+00 | ND | ND | ND | ND | ND | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.49E+00 |
| Exported energy, thermal | MJ | 0.00E+00 | 0.00E+00 | 0.00E+00 | ND | 0.00E+00 | ND | ND | ND | ND | ND | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.99E-01 |

Information on biogenic carbon content

| Results per functional or declared unit | | |
|---|------|----------|
| BIOGENIC CARBON CONTENT | Unit | QUANTITY |
| Biogenic carbon content in product | kg C | 1.49E-01 |
| Biogenic carbon content in packaging | kg C | 1.09E-03 |

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO₂.

Additional mandatory and voluntary impact category indicators

| Indicator | Unit | A1-A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
|-----------|-----------|----------|----------|----------|----|----------|----|----|----|----|----|----------|----------|----------|----------|-----------|
| GWP-GHG | kg CO2 eq | 4.39E+00 | 1.35E-01 | 2.85E-01 | ND | 1.47E-01 | ND | ND | ND | ND | ND | 0.00E+00 | 1.36E-01 | 1.24E-01 | 8.23E-01 | -4.78E+00 |

This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO₂ is set to zero.

Abbreviations

| Abbreviation | Definition | Category |
|---------------------------|---|---------------------------------|
| EN | European Norm (Standard) | General Abbreviations |
| EPD | Environmental Product Declaration | General Abbreviations |
| ISO | International Organization for Standardization | General Abbreviations |
| LCA | Life Cycle Assessment | General Abbreviations |
| PCR | Product Category Rules | General Abbreviations |
| CEN | European Committee for Standardization | General Abbreviations |
| CPC | Central Product Classification | General Abbreviations |
| GWP | Global Warming Potential (incl. biogenic CO ₂ eq.) | Environmental Impact Indicators |
| GWP-fossil | Global Warming Potential from fossil sources (kg CO ₂ eq.) | Environmental Impact Indicators |
| GWP-biogenic | Global Warming Potential from biogenic sources (kg CO ₂ eq.) | Environmental Impact Indicators |
| GWP-luluc | Global Warming Potential from land use and land use change (kg CO ₂ eq.) | Environmental Impact Indicators |
| ODP | Ozone Depletion Potential (kg CFC-11 eq.) | Environmental Impact Indicators |
| AP | Acidification Potential (mol H ⁺ eq.) | Environmental Impact Indicators |
| EP-freshwater | Eutrophication Potential (kg P eq.) | Environmental Impact Indicators |
| EP-marine | Eutrophication Potential (kg N eq.) | Environmental Impact Indicators |
| EP-terrestrial | Eutrophication Potential (mol N eq.) | Environmental Impact Indicators |
| POCP | Photochemical Ozone Creation Potential (kg NMVOC eq.) | Environmental Impact Indicators |
| ADP-mineral | Abiotic Depletion Potential for non-fossil resources (kg Sb eq.) | Environmental Impact Indicators |
| ADP-fossil | Abiotic Depletion Potential for fossil resources (MJ) | Environmental Impact Indicators |
| WDP | Water Deprivation Potential (m ³ world eq. deprived) | Environmental Impact Indicators |
| PM | Potential incidence of disease due to PM emissions | Environmental Impact Indicators |
| IRP | Potential Human exposure efficiency relative to U235 | Environmental Impact Indicators |
| ETP-fw | Potential Comparative Toxic Unit for ecosystems | Environmental Impact Indicators |
| HTP-c | Potential Comparative Toxic Unit for humans | Environmental Impact Indicators |
| HTP-nc | Potential Comparative Toxic Unit for humans | Environmental Impact Indicators |
| SQP | Potential soil quality index | Environmental Impact Indicators |
| PERE | Use of renewable primary energy resources (MJ) | Resource Use Indicators |
| PERM | Use of renewable primary energy resources as raw materials (MJ) | Resource Use Indicators |
| PERT | Total use of renewable primary energy resources (MJ) | Resource Use Indicators |
| PENRE | Use of non-renewable primary energy resources (MJ) | Resource Use Indicators |
| PENRM | Use of non-renewable primary energy resources as raw materials (MJ) | Resource Use Indicators |
| PENRT | Total use of non-renewable primary energy resources (MJ) | Resource Use Indicators |
| SM | Use of secondary material (kg) | Resource Use Indicators |
| RSF | Use of renewable secondary fuels (MJ) | Resource Use Indicators |
| NRSF | Use of non-renewable secondary fuels (MJ) | Resource Use Indicators |
| FW | Use of net fresh water (m ³) | Resource Use Indicators |
| A1 | Raw material supply | Lifecycle Stages / Modules |
| A2 | Transport | Lifecycle Stages / Modules |
| A3 | Manufacturing | Lifecycle Stages / Modules |
| A4 | Transport | Lifecycle Stages / Modules |
| A5 | Construction/installation | Lifecycle Stages / Modules |
| B1 | Use | Lifecycle Stages / Modules |
| B2 | Maintenance | Lifecycle Stages / Modules |
| B3 | Repair | Lifecycle Stages / Modules |
| B4 | Replacement | Lifecycle Stages / Modules |
| B5 | Refurbishment | Lifecycle Stages / Modules |
| B6 | Operational energy use | Lifecycle Stages / Modules |
| B7 | Operational water use | Lifecycle Stages / Modules |
| C1 | Deconstruction/demolition | Lifecycle Stages / Modules |
| C2 | Transport | Lifecycle Stages / Modules |
| C3 | Waste processing | Lifecycle Stages / Modules |
| C4 | Disposal | Lifecycle Stages / Modules |
| D | Reuse-Recovery-Recycling potential | Lifecycle Stages / Modules |
| PA6 | Polyamide 6 | Other Relevant Terms |
| PET | Polyethylene Terephthalate | Other Relevant Terms |
| SBR | Styrene Butadiene Rubber | Other Relevant Terms |
| ATH | Aluminium trihydrate | Other Relevant Terms |
| C2C | Cradle to Cradle | Other Relevant Terms |
| GWP-GHG | Global Warming Potential - Green House Gas | Other Relevant Terms |
| kg | Kilogram | Other Relevant Terms |
| kg CO ₂ eq. | Kilograms of Carbon Dioxide Equivalent | Other Relevant Terms |
| kg CO ₂ eq/kWh | Kilograms of Carbon Dioxide Equivalent per kilowatt-hour | Other Relevant Terms |
| kg/m ² | Kilograms per square meter | Other Relevant Terms |
| WCM | World Class Manufacturing | Other Relevant Terms |
| FCSS | Floor Covering Standard Symbols | Other Relevant Terms |
| RSL | Reference Service Life | Other Relevant Terms |
| CF | Conversion factor | Other Relevant Terms |

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