## SIKA RESINOUS \& CEMENTITIOUS FLOORING SYSTEMS

## BUILDING TRUST CONSTRUIRE LA CONFIANCE

## ENVIRONMENTAL PRODUCT DECLARATION



Included floor coating systems

Sika ComfortFloor® ${ }^{\circledR}$
Sika ComfortFloor® ${ }^{\circledR}$ Pro Sikafloor ${ }^{\circledR}$ DecoFlake ${ }^{\circledR}$ System Sikafloor ${ }^{\circledR}$ ESD Control System Sikafloor ${ }^{\circledR}$ Fastflor ${ }^{\circledR}$ CR

Sikafloor® Morritex Sikafloor ${ }^{\circledR}$ NA PurCem ${ }^{\circledR}$ Sikafloor ${ }^{\circledR}$ Quartzite ${ }^{\circledR}$ System
Sikafloor ${ }^{\circledR}$ Resoclad MRW Type II Sikafloor ${ }^{\circledR}$ Smooth Epoxy

Sikafloor® Terrazzo
Sikafloor®-52 PC Grey
Sikafloor®-53 PC White
Sikalastic ${ }^{@-3900 ~ T r a f f i c ~ C o a t i n g ~ S y s t e m ~}$

The development of this environmental product declaration (EPD) for resinous and cementitious floor coating systems manufactured in Canada was commissioned by Sika Canada. This EPD was developed in compliance with CAN/CSA-ISO 14025 and ISO 21930 by Groupe AGÉCO and has been verified by Athena Sustainable Materials Institute.

This EPD includes life cycle assessment (LCA) results for the production, construction, use and end-of-life stages (cradle-to-grave).

For more information about Sika Canada, please go to www.sika.ca
Issue date: July 10, 2019


In order to support comparative a ssertions, this EPD meets all comparability requirements stated in ISO 14025:2006. However, differences in certa in assumptions, data quality, a nd variability between LCA data sets may still exist. As such, caution should be exercised when evaluating EPDs from different manufacturersorprograms, asthe EPD results may not be entirely comparable. Any EPD compa rison must be caried out at the construction works level per ISO 21930:2017 guidelines. The results of this EPD reflect an average performance by the product and its actual impacts may vary on a case-to-case basis. This declaration shall solely be used in a Business to Business (B2B) capacity.

| Program operator | CSA Group |
| :---: | :---: |
|  | 178 Rexdale Blvd, Toronto, ON, Canada M9W 1R3 \\| www.c sagroup.org |
| Product | Sika resinous and cementitious flooring systems |
| EPD registration number | 2068-2738 |
| EPD recipient organization | Sika Canada |
|  | 601 Delmar Ave., Pointe-Claire (Quebec) H9R 4A9 \| www.sika.ca |
| Reference PCR | PC R for Resinous Floor Coatings |
|  | NSF Intemational \| Valid until December 17, 2023 |
| Date of issue (approval) | July 10, 2019 |
| Period of validity | J uly 10, 2019 - July 09, 2024 |
| The PCR review was conducted by | Thomas P. Gloria, Ph. D. \| Mr. Bill Sthough | Mr. Jack Geibig |
| The LCA and EPD were prepared by | Groupe AGÉCO \| www.groupeageco.ca | ageco@groupeageco.ca |
| This EPD and related data were independently verified by an extemal verifier, Lindita Bushi, according to CAN/CSA-ISO 14025:2006 and ISO 21930:2017. | Intemal $\underline{\underline{x} \text { Extemal }}$ |
|  | Lindita Busluy |
|  |  |
|  | Lindita Bushi, Ph.D. |
|  | Athena Sustainable Materials Institute |
|  | 280 Albert St., Suite 404, Ottawa, Ontario, Canada K1P 5 G 8 |
|  | lindita.bushi@athena smi.ord \| www.athenasmi.org |
| Functional unit | $1 \mathrm{~m}^{2}$ of covered and protected flooring surface fora period of 60 years |
| Market and tec hnic al lifetimes | Market: 5 to 30 years \| Technical: 5 to 60 years |
| Content of the products | See section 2 for complete description |
| Data quality assessment score | Good |
| Manufacturing locations | Pointe-Claire, Quebec, Canada |
|  | Edmonton, Alberta, Canada |
|  | Surrey, Bristish Columbia, Canada |

## Sika Canada | Sika Resinous \& Cementitious Flooring Systems

## Potential environmental impacts

The potential environmental impacts of $\mathbf{1} \mathbf{~ m}^{\mathbf{2}}$ of covered and protected flooring surface for a period of $\mathbf{6 0}$ years are summarized below for each floor system, service life, and main environmental indicator assessed (based on life cycle impact assessment method TRACI 2.1). For each floor system, there are at least two different service life values: a technical service life, for which coating systems are designed for, and a market service life, a typical period after which users replace coating systems. The service life also differs depending on the application, whether it is commercial or industrial. Please, refer to the full EPD or LCA report for more detailed results. Results on resource use, waste generated, and output flows are presented in the full EPD.

Total cradle-to-grave (A1-C4) results of resinous and cementitious flooring systems per $\mathbf{m}^{2}$ of covered and protected surface
(complete results are available in the full EPD)

| Systems | Application | Service life type | Service <br> life | $\begin{gathered} \text { GWP } \\ \mathrm{kg} \mathrm{CO}_{2} \mathrm{eq} . \end{gathered}$ | $\begin{gathered} \text { AP } \\ \mathrm{kg} \mathrm{SO}_{2} \text { eq. } \end{gathered}$ | $\begin{gathered} \text { EP } \\ \mathrm{kg} \mathrm{~N} \text { eq. } \end{gathered}$ | $\begin{gathered} \text { SFP } \\ \mathrm{kg} \mathrm{O}_{3} \text { eq. } \end{gathered}$ | $\underset{\text { kg CFC-11 eq. }}{\text { ODP }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sika ComfortFloor ${ }^{\circledR}$ | Commercial | Market | 20 | $2.33 \mathrm{E}+1$ | $1.12 \mathrm{E}-1$ | $6.30 \mathrm{E}-2$ | $1.45 \mathrm{E}+0$ | 8.35E-7 |
|  | Commercial | Technical | 30 | $2.27 \mathrm{E}+1$ | $1.08 \mathrm{E}-1$ | $6.09 \mathrm{E}-2$ | $1.39 \mathrm{E}+0$ | 7.80E-7 |
|  | Industrial | Market | 10 | $2.52 \mathrm{E}+1$ | $1.24 \mathrm{E}-1$ | $6.91 \mathrm{E}-2$ | $1.63 \mathrm{E}+0$ | $1.00 \mathrm{E}-6$ |
|  | Industrial | Technical | 15 | $2.39 \mathrm{E}+1$ | $1.16 \mathrm{E}-1$ | $6.50 \mathrm{E}-2$ | $1.51 \mathrm{E}+0$ | 8.91E-7 |
| Sika ComfortFloor® ${ }^{\circledR}$ Pro | Commercial | Market | 30 | $4.71 \mathrm{E}+1$ | $2.33 \mathrm{E}-1$ | $1.09 \mathrm{E}-1$ | $3.10 \mathrm{E}+0$ | $1.31 \mathrm{E}-6$ |
|  | Industrial | Technical |  |  |  |  |  |  |
|  | Commercial | Technical | 60 | $4.65 \mathrm{E}+1$ | $2.29 \mathrm{E}-1$ | $1.07 \mathrm{E}-1$ | $3.04 \mathrm{E}+0$ | $1.26 \mathrm{E}-6$ |
|  | Industrial | Market | 20 | $4.77 \mathrm{E}+1$ | $2.36 \mathrm{E}-1$ | 1.11E-1 | $3.16 \mathrm{E}+0$ | $1.37 \mathrm{E}-6$ |
| Sikafloor ${ }^{\circledR}$ Decoflake ${ }^{\circledR}$ System | Commercial | Market | 20 | $1.96 \mathrm{E}+1$ | $9.72 \mathrm{E}-2$ | $6.17 \mathrm{E}-2$ | $1.46 \mathrm{E}+0$ | $2.01 \mathrm{E}-6$ |
|  | Commercial | Technical | 30 | $1.73 \mathrm{E}+1$ | $8.73 \mathrm{E}-2$ | $5.35 \mathrm{E}-2$ | $1.29 \mathrm{E}+0$ | $1.68 \mathrm{E}-6$ |
|  | Industrial | Market | 10 | $2.64 \mathrm{E}+1$ | $1.27 \mathrm{E}-1$ | $8.64 \mathrm{E}-2$ | $1.96 \mathrm{E}+0$ | $2.98 \mathrm{E}-6$ |
|  | Industrial | Technical | 15 | $2.19 \mathrm{E}+1$ | $1.07 \mathrm{E}-1$ | $6.99 \mathrm{E}-2$ | $1.63 \mathrm{E}+0$ | $2.33 \mathrm{E}-6$ |
| Sikafloor ${ }^{\circledR}$ ESD Control System | Commercial | Market | 10 | $3.24 \mathrm{E}+1$ | $1.63 \mathrm{E}-1$ | $1.28 \mathrm{E}-1$ | $2.50 \mathrm{E}+0$ | $4.04 \mathrm{E}-6$ |
|  | Commercial | Technical | 15 | $2.20 \mathrm{E}+1$ | $1.11 \mathrm{E}-1$ | $8.83 \mathrm{E}-2$ | $1.69 \mathrm{E}+0$ | $2.71 \mathrm{E}-6$ |
|  | Industrial | Market and Technical | 5 | $6.37 \mathrm{E}+1$ | $3.19 \mathrm{E}-1$ | $2.48 \mathrm{E}-1$ | $4.94 \mathrm{E}+0$ | $8.01 \mathrm{E}-6$ |
| Sikafloor ${ }^{\circledR}$ Fastflor ${ }^{\circledR}$ CR Broadcast | Commercial | Market | 20 | $1.40 \mathrm{E}+1$ | $7.25 \mathrm{E}-2$ | $5.70 \mathrm{E}-2$ | $9.05 \mathrm{E}-1$ | $1.85 \mathrm{E}-6$ |
|  | Commercial | Technical | 30 | $1.24 \mathrm{E}+1$ | $6.40 \mathrm{E}-2$ | $5.06 \mathrm{E}-2$ | 8.01E-1 | $1.62 \mathrm{E}-6$ |
|  | Industrial | Market | 10 | $1.90 \mathrm{E}+1$ | $9.78 \mathrm{E}-2$ | $7.63 \mathrm{E}-2$ | $1.22 \mathrm{E}+0$ | $2.53 \mathrm{E}-6$ |
|  | Industrial | Technical | 15 | $1.57 \mathrm{E}+1$ | $8.09 \mathrm{E}-2$ | $6.35 \mathrm{E}-2$ | $1.01 \mathrm{E}+0$ | $2.08 \mathrm{E}-6$ |
| Sikafloor ${ }^{\circledR}$ Fastflor ${ }^{\circledR}$ CR Smooth | Commercial | Market | 10 | $1.79 \mathrm{E}+1$ | $9.14 \mathrm{E}-2$ | $7.34 \mathrm{E}-2$ | $1.10 \mathrm{E}+0$ | $2.35 \mathrm{E}-6$ |
|  | Commercial | Technical | 15 | $1.28 \mathrm{E}+1$ | $6.54 \mathrm{E}-2$ | $5.36 \mathrm{E}-2$ | 7.85E-1 | $1.65 \mathrm{E}-6$ |
|  | Industrial | Market and Technical | 5 | $3.33 \mathrm{E}+1$ | $1.69 \mathrm{E}-1$ | $1.33 \mathrm{E}-1$ | $2.06 \mathrm{E}+0$ | $4.45 \mathrm{E}-6$ |
| Sikafloor ${ }^{\circledR}$ Morritex ${ }^{\circledR}$ trowelled | Commercial |  | 30 | $1.49 \mathrm{E}+1$ | $7.61 \mathrm{E}-2$ | $5.37 \mathrm{E}-2$ | $1.35 \mathrm{E}+0$ | $2.09 \mathrm{E}-6$ |
|  | Industrial | Technical |  |  |  |  |  |  |
|  | Commercial | Technical | 60 | $1.28 \mathrm{E}+1$ | $6.46 \mathrm{E}-2$ | $4.59 \mathrm{E}-2$ | $1.15 \mathrm{E}+0$ | $1.79 \mathrm{E}-6$ |
|  | Industrial | Market | 20 | $1.70 \mathrm{E}+1$ | $8.75 \mathrm{E}-2$ | $6.15 \mathrm{E}-2$ | $1.55 \mathrm{E}+0$ | $2.39 \mathrm{E}-6$ |

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## Sika Canada | Sika Resinous \& Cementitious Flooring Systems

Total cradle-to-grave (A1-C4) results of resinous and cementitious flooring systems per $\mathbf{m}^{2}$ of covered and protected surface (cont'd)

| Systems | Application | Service life type | Service <br> life | $\begin{gathered} \mathrm{GWP} \\ \mathrm{~kg} \mathrm{CO}_{2} \text { eq. } \end{gathered}$ | $\begin{gathered} \text { AP } \\ \mathrm{kg} \mathrm{SO}_{2} \text { eq. } \end{gathered}$ | $\begin{gathered} \text { EP } \\ \mathrm{kg} \mathrm{~N} \text { eq. } \end{gathered}$ | $\begin{gathered} \text { SFP } \\ \mathrm{kg} \mathrm{O}_{3} \text { eq. } \end{gathered}$ | $\underset{\text { kg CFC-11 eq. }}{\text { ODP }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sikafloor ${ }^{\circledR}$ Morritex ${ }^{\circledR}$ smooth and broadcast | Commercial | Market | 20 | $2.90 \mathrm{E}+1$ | $1.58 \mathrm{E}-1$ | $1.08 \mathrm{E}-1$ | $2.75 \mathrm{E}+0$ | $4.05 \mathrm{E}-6$ |
|  | Commercial | Technical | 30 | $2.21 \mathrm{E}+1$ | $1.21 \mathrm{E}-1$ | $8.31 \mathrm{E}-2$ | $2.10 \mathrm{E}+0$ | $3.09 \mathrm{E}-6$ |
|  | Industrial | Market | 10 | $4.95 \mathrm{E}+1$ | $2.69 \mathrm{E}-1$ | $1.82 \mathrm{E}-1$ | $4.68 \mathrm{E}+0$ | $6.95 \mathrm{E}-6$ |
|  | Industrial | Technical | 15 | $3.58 \mathrm{E}+1$ | $1.95 \mathrm{E}-1$ | $1.33 \mathrm{E}-1$ | $3.39 \mathrm{E}+0$ | $5.02 \mathrm{E}-6$ |
| Sikafloor ${ }^{\circledR}$ NA PurCem ${ }^{\circledR}$ | Industrial | Market | 20 | $1.78 \mathrm{E}+1$ | 8.94E-2 | 3.23E-2 | $1.42 \mathrm{E}+0$ | $1.48 \mathrm{E}-6$ |
|  | Industrial | Technical | 30 | $1.71 \mathrm{E}+1$ | 8.52E-2 | $3.07 \mathrm{E}-2$ | $1.36 \mathrm{E}+0$ | $1.40 \mathrm{E}-6$ |
| Sikafloor ${ }^{\circledR}$ Quartzite ${ }^{\circledR}$ System HDB and trowelled | Commercial | Market | 30 | $1.64 \mathrm{E}+1$ | 7.82E-2 | $5.93 \mathrm{E}-2$ | $1.41 \mathrm{E}+0$ | $2.29 \mathrm{E}-6$ |
|  | Industrial | Technical |  |  |  |  |  |  |
|  | Commercial | Technical | 60 | $1.42 \mathrm{E}+1$ | $6.84 \mathrm{E}-2$ | $5.11 \mathrm{E}-2$ | $1.22 \mathrm{E}+0$ | $1.98 \mathrm{E}-6$ |
|  | Industrial | Market | 20 | $1.87 \mathrm{E}+1$ | $8.80 \mathrm{E}-2$ | $6.75 \mathrm{E}-2$ | $1.59 \mathrm{E}+0$ | $2.61 \mathrm{E}-6$ |
| Sikafloor ${ }^{\circledR}$ Quartzite ${ }^{\circledR}$ System Broadcast | Commercial | Market | 20 | $1.61 \mathrm{E}+1$ | 7.47E-2 | $6.01 \mathrm{E}-2$ | $1.23 \mathrm{E}+0$ | $2.27 \mathrm{E}-6$ |
|  | Commercial | Technical | 30 | $1.38 \mathrm{E}+1$ | $6.49 \mathrm{E}-2$ | $5.19 \mathrm{E}-2$ | $1.05 \mathrm{E}+0$ | $1.96 \mathrm{E}-6$ |
|  | Industrial | Market | 10 | $2.28 \mathrm{E}+1$ | $1.04 \mathrm{E}-1$ | 8.46E-2 | $1.79 \mathrm{E}+0$ | 3.22E-6 |
|  | Industrial | Technical | 15 | $1.83 \mathrm{E}+1$ | $8.44 \mathrm{E}-2$ | $6.83 \mathrm{E}-2$ | $1.42 \mathrm{E}+0$ | $2.59 \mathrm{E}-6$ |
| Sikafloor® Resoclad MRW Type II | Commercial | Market | 20 | $8.95 \mathrm{E}+0$ | $4.22 \mathrm{E}-2$ | $3.32 \mathrm{E}-2$ | $9.06 \mathrm{E}-1$ | $7.37 \mathrm{E}-7$ |
|  | Commercial | Technical | 30 | $7.37 \mathrm{E}+0$ | $3.47 \mathrm{E}-2$ | $2.65 \mathrm{E}-2$ | $6.89 \mathrm{E}-1$ | $5.68 \mathrm{E}-7$ |
|  | Industrial | Market | 10 | $1.37 \mathrm{E}+1$ | $6.49 \mathrm{E}-2$ | $5.33 \mathrm{E}-2$ | $1.56 \mathrm{E}+0$ | $1.25 \mathrm{E}-6$ |
|  | Industrial | Technical | 15 | $1.05 \mathrm{E}+1$ | $4.98 \mathrm{E}-2$ | $3.99 \mathrm{E}-2$ | $1.12 \mathrm{E}+0$ | $9.07 \mathrm{E}-7$ |
| Sikafloor ${ }^{\circledR}$ Smooth Epoxy | Commercial | Market | 10 | $1.54 \mathrm{E}+1$ | 8.21E-2 | $6.02 \mathrm{E}-2$ | $1.40 \mathrm{E}+0$ | $2.06 \mathrm{E}-6$ |
|  | Commercial | Technical | 15 | $1.13 \mathrm{E}+1$ | $6.03 \mathrm{E}-2$ | $4.55 \mathrm{E}-2$ | $1.02 \mathrm{E}+0$ | $1.49 \mathrm{E}-6$ |
|  | Industrial | Market and Technical | 5 | $2.75 \mathrm{E}+1$ | $1.48 \mathrm{E}-1$ | $1.04 \mathrm{E}-1$ | $2.55 \mathrm{E}+0$ | $3.77 \mathrm{E}-6$ |
| Sikafloor® ${ }^{\circledR}$ Terrazzo | Commercial | Market | 30 | $2.90 \mathrm{E}+1$ | $1.54 \mathrm{E}-1$ | $1.19 \mathrm{E}-1$ | $2.69 \mathrm{E}+0$ | $3.68 \mathrm{E}-6$ |
|  | Commercial | Technical | 60 | $2.85 \mathrm{E}+1$ | $1.51 \mathrm{E}-1$ | 1.17E-1 | $2.58 \mathrm{E}+0$ | $3.63 \mathrm{E}-6$ |
| Sikafloor®-52 PC Grey | Commercial | Market | 30 | $2.75 \mathrm{E}+1$ | 1.16E-1 | $5.85 \mathrm{E}-2$ | $2.33 \mathrm{E}+0$ | $3.16 \mathrm{E}-6$ |
|  | Industrial | Technical |  |  |  |  |  |  |
|  | Commercial | Technical | 60 | $2.08 \mathrm{E}+1$ | $8.84 \mathrm{E}-2$ | 4.57E-2 | $1.74 \mathrm{E}+0$ | $2.35 \mathrm{E}-6$ |
|  | Industrial | Market | 20 | $3.43 \mathrm{E}+1$ | $1.45 \mathrm{E}-1$ | 7.12E-2 | $2.92 \mathrm{E}+0$ | $3.96 \mathrm{E}-6$ |
| Sikafloor®-53 PC White | Commercial | Market | 30 | $3.03 \mathrm{E}+1$ | 1.36E-1 | $6.33 \mathrm{E}-2$ | $2.77 \mathrm{E}+0$ | 3.67E-6 |
|  | Industrial | Technical |  |  |  |  |  |  |
|  | Commercial | Technical | 60 | $2.28 \mathrm{E}+1$ | $1.03 \mathrm{E}-1$ | $4.93 \mathrm{E}-2$ | $2.07 \mathrm{E}+0$ | $2.74 \mathrm{E}-6$ |
|  | Industrial | Market | 20 | $3.77 \mathrm{E}+1$ | $1.69 \mathrm{E}-1$ | 7.72E-2 | $3.47 \mathrm{E}+0$ | $4.60 \mathrm{E}-6$ |
| Sikalastic ${ }^{\circledR}$-3900 Traffic Coating System | Commercial | Market | 10 | $3.21 \mathrm{E}+1$ | $1.56 \mathrm{E}-1$ | $9.27 \mathrm{E}-2$ | $2.36 \mathrm{E}+0$ | $2.83 \mathrm{E}-6$ |
|  | Commercial | Technical | 15 | $2.31 \mathrm{E}+1$ | $1.12 \mathrm{E}-1$ | $6.75 \mathrm{E}-2$ | $1.68 \mathrm{E}+0$ | $2.01 \mathrm{E}-6$ |

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## Additional environmental information

This section provides additional relevant environmental information about the manufacturer and the floor systems that was not derived from the LCA.

## Sika's Commitment to sustainability

Providing long lasting and high-performance solutions to the benefit of our customers, Sika is committed to pioneering sustainable solutions that are safer, have the lowest impact on resources and address global environmental challenges. Therefore, Sika assumes the responsibility to provide sustainable solutions in order to improve material, water and energy efficiency in construction and transportation. Sika strives to create more value for all its stakeholders with its products, systems and solutions along the whole value chain and throughout the entire life span of its products. Sika is committed to measure, improve and communicate sustainable value creation: "More value, less impact" refers to the company's commitment to maximize the value of its solutions to all stakeholders while reducing resource consumption and impact on the environment.

## VOC content

Individual coating products in this EPD contain between 0 and 200 grams of VOC per litre. The VOC content was measured according to EPA 24 or ASTM D2369 standard methods. All products were compliant with the Canadian "Volatile Organic Compound (VOC) Concentration Limits for Architectural Coatings Regulations" at the time of the study. Sika Canada discloses the VOC content of its products.

## Waste packaging management

Sika Canada encourages its customers to responsibly dispose of used packaging. Most of them are recyclable. To make recycling easier, it is recommended to separate used packaging according to their material (paper, plastic and metal). Ask information to local municipalities about recycling programs for industrial coating packaging.

For more information: www.sika.ca

## 1. Description of Sika Canada

Sika Canada Inc., a member of the Sika Group, is a leader in the field of specialty chemicals for construction. Sika's product portfolio encompasses a vast range of construction solutions, "From Foundations Upwards", including waterproofing solutions, concrete production (ready mix and precast), concrete repair and protection, joint sealing, elastic \& structural bonding, specialized flooring including industrial, commercial, institutional \& decorative systems and roofing systems. This extensive range of products enablestailor-made solutions, in new construction as well as refurbishment. Beyond the quality and performance of its products, Sika has eamed its reputation by offering an unparalleled level of expertise and support, from conception to completion.

## 2. Description of product

### 2.1. Definition and product classific ation

This EPD developed with the Product Category Rules (PCR) for Resinous Floor Coatings from NSF covers 14 floor coating systems comprising resinous and cementitious products. Resinous systems include epoxy, polyurethane, polyurethane aliphatic, and urethane acrylic-type systems made of individual coatings (i.e. primer, basecoat and topcoat) sold as liquid components. Components are shipped to the construction site where they are mixed and coated one above the other. The cementitious systems are made of individual cementitio us and resinouscoatings(i.e. primer, basecoat and topcoat). Cementitious components are sold as powders that are then mixed with water or a polymerduring installation.


Figure 1: Examples of resinous floor coating systems
The main substanc es entering the composition of resinous floor coating systems are presented in Table 1.
Table 1: Composition of resinous floor coating systems included in this EPD

| System | Components | Role |
| :---: | :---: | :---: |
| Sika Comfortoor® | Sika floo ${ }^{\text {® }}$-156CA | Primer |
|  | Sika floor®-330 | Base coat |
|  | Sika floor®-304 W NA/ Sika floor ${ }^{\text {®-3 }}$-305 W NA | Top coat |
| Sika ComfortPoor ${ }^{\circledR}$ Pro | Sika floor ${ }^{\circledR}$ Comfort Adhesive | Mat adhesive |
|  | Sika floor ${ }^{\text {® }}$ C omfort Regupol-6015H | Recycled rubber mat |
|  | Sika floor ${ }^{\circledR}$ Comfort Porefiller | Mat pore filler |
|  | Sika floor®-330 | Base coat |
|  | Sika floor ${ }^{\text {®-304 }}$ W W NA/ Sika floor ${ }^{\text {®-3 }} 305$ W NA | Top coat |


| System | Component | Role |
| :---: | :---: | :---: |
| Sikafloor® DecoFake ${ }^{\text {® }}$ | Sika floor®-261 ${ }^{\text {CA/ Sikafloorere-1610 (if high humidity) }}$ | Primer |
|  | Quartz aggregate | Aggregate |
|  | Sika floore-261CA | Base Coat |
|  | Sika floor® ${ }^{\text {D }}$ DecoFlake ${ }^{\circledR}$ | Color flakes |
|  | Sika floor®-2002 | Top coat |
| Sikafloor® ESD Control | Sika floore-156CA/Sikafloore-1610 (if high humidity) | Primer |
|  | Sika floor®-222 W ESD | Base Coat |
|  | Sika floor®-260 ESD/Sikafloor-270 ESD | Top Coat |
| Sikafloor ${ }^{\text {® Fastflor }}{ }^{\text {® }}$ CR | Sika floor ${ }^{\text {® }}$ Fastflo ${ }^{\text {® }}$ CR | Primer |
|  | Quartz aggregate | Aggregate |
|  | Sika floor® ${ }^{\text {Pastflo }{ }^{\text {® }} \text { CR }}$ | Base Coat |
| Sikafloor® Monitex | Sika floor®-156CA | Primer |
|  | Sika floor-156 ${ }^{\text {ca }}$ | Screed mortar |
|  | Sika floor ${ }^{\text {® }}$ Aggregate PT | Screed mortar |
|  | Sika floore-261 ${ }^{\text {CA }}$ | Base Coat |
|  | Sika floor ${ }^{\text {®-262 }}$ - ${ }^{\text {ca }}$ | Grout Coat |
|  | Sika floore-261 ${ }^{\text {CA }}$ | Top Coat |
| Sikafloor ${ }^{\text {P }}$ PurCem ${ }^{\text {® }}$ | Sikafloor®-22 NA PurCem ${ }^{\text {® }}$ | Broadcast body coat |
|  | Sand | Broadcast body coat |
|  | Sika floor®-31 NA PurCem®/Sikafloore-33 NA PurCem ${ }^{\text {® }}$ | Top coat |
| Sikafloor ${ }^{\text {® }}$ Quartzite ${ }^{\text {® }}$ | Sika floore-156CA/Sika floor® Duoc hem-9205 | Primer |
|  | Sika floore-156CA/Sika floor® Duochem-9205 | Screed mortar |
|  | Sika floor ${ }^{\otimes}$ Aggregate PT | Screed mortar |
|  | Sika floor® ${ }^{\text {Trowel/ Broadcast Quartz Aggregate }}$ | Screed mortar |
|  | Sikafloor® Duochem-9200 | Grout coat |
|  | Sika floor ${ }^{\text {®-2002/ Sikafloor }{ }^{\text {® }} \text {-217 }}$ | Top coat |
| Sikafloor ${ }^{\circledR}$ Resoclad MRWType II | Sikalastic ${ }^{\text {® }} 390$ Membrane | Base coat |
|  | Sika floor® ${ }^{\text {D }}$ Duoc hem-6001 | Top coat |
| Sikafloor ${ }^{\text {® }}$ Smooth | Sika floore-261 ${ }^{\text {CA }}$ / Sika floor®-1610 (if high humidity) | Primer |
| Epoxy | Sika floore-261CA | Top Coat |
|  | Sika floor® ${ }^{\text {® }}$ Terazzo | Screed mortar |
|  | Sika floor ${ }^{\text {® }}$ Duochem-305 | Top Coat |
| Sikafloor-52 PC Grey | Sika floor®-156CA/Sikafloore-1610 (if high humidity) | Primer |
|  | Sikafloor®-52 PC Grey | Base coat |
|  | Scofield ${ }^{\text {® }}$ Formula One ${ }^{\text {m }}$ Lithium Densifier MP | Additive |
|  | Scofield ${ }^{\circledR}$ Formula One ${ }^{\text {m }}$ Guard-W | Additive |
|  | Scofield ${ }^{\circledR}$ Formula One ${ }^{\text {m }}$ Lquid Dye | Additive |
| Sikafloor-53 PC White |  | Primer |
|  | Sika floor®-53 PC White | Base coat |
|  | Scofield ${ }^{\text {® }}$ Formula One ${ }^{\text {m }}$ Lithium Densifier MP | Additive |
|  | Scofield ${ }^{\circledR}$ Formula One ${ }^{\text {m' }}$ Guard-W | Additive |
|  | Scofield ${ }^{\circledR}$ Formula One ${ }^{\text {m }}$ Lquid Dye | Additive |
| Sikalastic ${ }^{\text {® }} 3900$ Traffic | Sika ${ }^{\circledR}$ MTPrimer/Sikala stic ${ }^{\text {® }}$-120 FS Primer | Primer |
|  | Sikalastic ${ }^{\text {- }} 390$ Membrane | Base coat |
|  | Sika lastic © $391 \mathrm{~N} /$ Sikalastic ${ }^{\text {® - } 220 ~ F S ~}$ | Top coat |

More information on these systems is available on Sika Canada's website:
https://can.sika.com/en/solutions-and-products.html

### 2.2. Material content

The material composition of each component as disclosed in SDS (Safety Data Sheets) are provided in Table 2 as required by the PCR. The complete component formulations were used to calculate the LCA results.

Table 2: Composition of components as disc losed in SDS

| Components | Ingredient ${ }^{1}$ | CASNo. | Concentration (\%w/w) |
| :---: | :---: | :---: | :---: |
| Quarta agregate | No SDS a vailable for this product |  |  |
| Scofield ${ }^{\circledR}$ Formula One ${ }^{\mathbb{M}}$ Lithium Densifier MP | Silic ic acid, lithium salt | 12627-14-4 | $>=10-<=30$ |
| Scofield ${ }^{\circledR}$ Formula One ${ }^{T M}$ Lquid Dye Concentrate | Propylene carbonate | 108-32-7 | $>=80-<=100$ |
| Scofield ${ }^{\circledR}$ Formula | Siloxanes and Silicones, di-Me, methoxy Ph, polymers with Ph silsesquioxanes, methoxy-te minated | 68957-04-0 | $>=1-<2$ |
|  | Silic ic acid, lithium salt | 12627-14-4 | $>=1-<2$ |
| Sika ${ }^{\text {® }}$ MTPrimer | (Part A) Quartz (SiO2) | 14808-60-7 | $>=40-<50$ |
|  | (Part A) bisphenol-A-(epic hlorhydrin) epoxy resin | 25068-38-6 | $>=30-<40$ |
|  | (Part A) bisphenol-F-(epic hlorhydrin) epoxy resin | 28064-14-4 | $>=10-<20$ |
|  | (Part A) oxirane, mono[(C12-14a lkyloxy)methyl]derivatives | 68609-97-2 | $>=2-<5$ |
|  | (Part A) Quartz (SiO2) < $<\mu m$ | 14808-60-7 | $>=0-<1$ |
|  | (Part B) Benzyl alcohol | 100-51-6 | $>=40-<50$ |
|  | (Part B) Isophoronediamine | 2855-13-2 | $>=10-<20$ |
|  | (Part B) m-phenylenebis(methylamine) | 1477-55-0 | $>=10-<20$ |
|  | (Part B) bisphenol-A-(epic hlorhydrin) epoxy resin | 25068-38-6 | $>=10-<20$ |
|  | (Part B) ethanol | 64-17-5 | $>=5-<10$ |
|  | (Part B) Phenol, 4-dodecyl-, branched | $\begin{aligned} & \text { 210555-94- } \\ & 5 \end{aligned}$ | $>=2-<5$ |
|  | (Part B) 2,4,6-tris(dimethyla minomethyl)phenol | 90-72-2 | $>=2-<5$ |
| Sikafloor ${ }^{\text {® }}$ | Quart (SiO2) | 14808-60-7 | $>=90-<=100$ |
| Aggregate PT | Dibutylphtalate | 84-74-2 | $>=0.1-<1$ |
| Sikafloor ${ }^{\circledR}$ Comfort Adhesive | (Part A) Quartz (SiO2) | 14808-60-7 | $>=0-<1$ |
|  | (Part B) Diphenylmetha ned iisocyanate, isomeres and homologues | 9016-87-9 | $>=50-<60$ |
|  | (Part B) 4,4'-methylenediphenyl diiso cyanate | 101-68-8 | $>=40-<50$ |
|  | (Part B) o-(p-isocyanatobenzyl)phenyl isocyanate (MDI) | 5873-54-1 | $>=5-<10$ |
| Sikafloor ${ }^{\circledR}$ Comfort Porefiller | Alkane, C 14-17-, chloro- | 85535-85-9 | $>=10-<20$ |
|  | Quart (SiO2) | 14808-60-7 | $>=5-<10$ |
|  | 2-ethylhexane-1,3-diol | 94-96-2 | $>=1-<2$ |
|  | Quartz (SiO2) $<5 \mu \mathrm{~m}$ | 14808-60-7 | $>=0-<1$ |

Sikafloor ${ }^{\circledR}$ Comfort
Regupol-6015H
No SDS a vaila ble for this product

[^2]| Components | Ingredients ${ }^{1}$ | CASNO. | Concentration (\%w/w) |
| :---: | :---: | :---: | :---: |
| Sikafloor ${ }^{\circledR}$ DecoFlake ${ }^{\circledR}$ | No SDS a vailable for this product |  |  |
| Sikafloor ${ }^{\text {® }}$ | 1-methyl-2-pyrolidone | 872-50-4 | $>=5-<10$ |
| Duochem-305 | triethylamine | 121-44-8 | $>=0-<1$ |
| Sikafloor ${ }^{\circledR}$ <br> Duochem-6001 | (Part A) bisphenol-A-(epic hlorhydrin) epoxy resin | 25068-38-6 | $>=10-<20$ |
|  | (Part A) oxirane, mono[(C12-14alkyloxy)methyl]derivatives | 68609-97-2 | $>=1-<2$ |
|  | (Part B) Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines | 68410-23-1 | $>=20-<30$ |
|  | (Part B) Benzyl alcohol | 100-51-6 | $>=10-<20$ |
|  | (Part B) 1-methoxy-2-propanol | 107-98-2 | $>=10-<20$ |
|  | (Part B) Ac etic acid | 64-19-7 | $>=2-<5$ |
|  | (Part B) triethylenetetramine | 112-24-3 | $>=2-<5$ |
|  | (Part B) 2,4,6-tris(dimethyla minomethyl)phenol | 90-72-2 | $>=1-<2$ |
| Sikafloor® Duochem-9200 | bisphenol-A-(epic hlormydrin) epoxy resin | 25068-38-6 | $>=90-<=100$ |
|  | oxirane, mono[(C 12-14-alkyloxy)methyl]derivatives | 68609-97-2 | $>=2-<5$ |
| Sikafloor ${ }^{\circledR}$ <br> Duochem-9205 | (Part A) bisphenol-A-(epic hlornydrin) epoxy resin | 25068-38-6 | $>=90-<=100$ |
|  | (Part A) oxirane, mono[(C12-14alkyloxy)methyl]derivatives | 68609-97-2 | $>=2-<5$ |
|  | (Part B) Isophoronediamine | 2855-13-2 | $>=40-<50$ |
|  | (Part B) Benzyl alcohol | 100-51-6 | $>=40-<50$ |
|  | (Part B) Phenol, 4-nonyl-, branched | 84852-15-3 | $>=10-<20$ |
|  | (Part B) Salic ylic acid | 69-72-7 | $>=1-<2$ |
| Sika floor ${ }^{\circledR}$ Fastflo ${ }^{\circledR}$ CR | bisphenol-A-(epic hlorhydrin) epoxy resin | 25068-38-6 | $>=85-<=90$ |
|  | 2,3-epoxypropyl o-tolyl ether | 2210-79-9 | $>=5-<10$ |
|  | (R)-p-mentha-1,8-diene | 5989-27-5 | $>=0-<1$ |
| Sikafloor® ${ }^{\text {Terrazz }}$ | (Part A) bisphenol-A-(epichlorhydrin) epoxy resin | 25068-38-6 | $>=50-<=60$ |
|  | (Part A) Dibutylphthalate | 84-74-2 | $>=2-<5$ |
|  | (Part A) 1,3-bis(2,3-epoxypropoxy)-2,2dimethylpropane | 17557-23-2 | $>=2-<5$ |
|  | (Part A) Trimethylopropane triglyc idylether | 30499-70-8 | $>=0-<1$ |
|  | (Part A) Quartz (SiO2) < $5 \mu \mathrm{~m}$ | 14808-60-7 | $>=0-<1$ |
|  | (Part B) Benzyl alcohol | 100-51-6 | $>=40-<50$ |
|  | (Part B) Isophoronediamine | 2855-13-2 | $>=30-<40$ |
|  | (Part B) m-phenylenebis(methylamine) | 1477-55-0 | $>=5-<10$ |
|  | (Part B) 2,2'-iminodiethylamine | 111-40-0 | $>=1-<2$ |
| Sikafloor® Trowel Quart Aggregate | Quartz (SiO2) < $5 \mu \mathrm{~m}$ | 14808-60-7 | $>=90-<=100$ |


| Components | Ingredient ${ }^{1}$ | CAS No. | Concentration (\%W/w) |
| :---: | :---: | :---: | :---: |
| Sikafloor®-156CA | (Part A) bisphenol-A-(epichlorhydrin) epoxy resin | 25068-38-6 | $>=70-<=80$ |
|  | (Part A) bisphenol-F-(epichlorhydrin) epoxy resin | 28064-14-4 | $>=5-<10$ |
|  | (Part A) oxirane, mono[(C12-14a lkyloxy)methyl]derivatives | 68609-97-2 | $>=2-<5$ |
|  | (Part A) Benzyl alcohol | 100-51-6 | $>=2-<5$ |
|  | (Part A) (R)-p-mentha-1,8-diene | 5989-27-5 | $>=0-<1$ |
|  | (Part B) Benzyl a lcohol | 100-51-6 | $>=40-<50$ |
|  | (Part B) Isophoronediamine | 2855-13-2 | $>=10-<20$ |
|  | (Part B) m-phenylenebis(methylamine) | 1477-55-0 | $>=10-<20$ |
|  | (Part B) 3,6,9-tria za undecamethylenedia mine | 112-57-2 | $>=10-<20$ |
|  | (Part B) 2,4,6-tris(dimethyla minomethyl)phenol | 90-72-2 | $>=5-<10$ |
|  | (Part B) Trimethylhexa methylened ia mine-1,6 cyanethylated | 93941-62-9 | $>=2-<5$ |
|  | (Part B) Trimethylhexamethylenediamine | 25620-58-0 | $>=1-<2$ |
| Sika floor®-1610 | Quartz (SiO2) | 14808-60-7 | $>=40-<50$ |
|  | bisphenol-A-(epichlorhydrin) epoxy resin | 25068-38-6 | $>=30-<40$ |
|  | bisphenol-F-(epichlorhydrin) epoxy resin | 28064-14-4 | $>=10-<20$ |
|  | oxirane, mono[(C 12-14-a lkyloxy)methyl]derivatives | 68609-97-2 | $>=2-<5$ |
|  | Quartz (SiO2) < $5 \mu \mathrm{~m}$ | 14808-60-7 | $>=0-<1$ |
| Sika floor®-2002 | bisphenol-A-(epichlorhydrin) epoxy resin | 25068-38-6 | $>=90-<=95$ |
|  | 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane | 17557-23-2 | $>=5-<10$ |
|  | [[(2-ethylhexyl)oxy]methyl]oxirane (2-ethylhexyl glycidyl ether) | 2461-15-6 | $>=2-<5$ |
| Sika floor ${ }^{\circledR}$-217 | bisphenol-A-(epichlorhydrin) epoxy resin (Part A) | 25068-38-6 | $>=60-<80$ |
|  | bisphenol-F-(epichlorhydrin) epoxy resin (Part A) | 28064-14-4 | $>=10-<20$ |
|  | oxirane, mono[(C 12-14-alkyloxy)methyl]derivatives (Part A) | 68609-97-2 | $>=5-<10$ |
|  | Benzyl alcohol (Part A) | 100-51-6 | $>=2-<5$ |
|  | ethyl 4- <br> [[(methylphenyla mino) methylene]a mino ]benzoate <br> (Part A) | 57834-33-0 | $>=2-<5$ |
|  | Benzyl a lcohol (Part B) | 100-51-6 | $>=30-<60$ |
|  | Isophoronediamine (Part B) | 2855-13-2 | $>=10-<30$ |
|  | 2,2,4(or 2,4,4)-trimethylhexa ne-1,6-diamine (Part B) | 25513-64-8 | $>=10-<30$ |
|  | Phenol, 4-dodecyl-, branched (Part B) | $\begin{aligned} & 210555-94- \\ & 5 \end{aligned}$ | $>=5-<10$ |
| Sika floore-22 NA PurCem ${ }^{\circledR}$ | (Part A) butane-1,4-diol | 110-63-4 | $>=2-<5$ |
|  | (Part B) 4,4'-methylenediphenyl diiso c ya nate | 101-68-8 | $>=40-<50$ |
|  | (Part B) Diphenylmetha ned iisocya nate, isomeres and homologues | 9016-87-9 | $>=40-<50$ |
|  | (Part B) o-(p-iso cyanatobenzyl)phenyl iso cyanate (MDI) | 5873-54-1 | $>=10-<25$ |
|  | (Part C) Quartz (SiO2) | 14808-60-7 | $>=15-<40$ |
|  | (Part C) Quartz (SiO2) $<5 \mu \mathrm{~m}$ | 14808-60-7 | $>=15-<40$ |
|  | (Part C) Portland cement | 65997-15-1 | $>=15-<40$ |


| Components | Ingredient ${ }^{1}$ | CAS No. | Concentration (\%W/ w) |
| :---: | :---: | :---: | :---: |
| Sikafloor®-222 W ESD | (Part A) bisphenol-A-(epichlorhydrin) epoxy resin | 25068-38-6 | $>=40-<50$ |
|  | (Part A) bisphenol-F-(epichlorhydrin) epoxy resin | 28064-14-4 | $>=10-<20$ |
|  | (Part A) oxirane, mono[(C12-14a lkyloxy)methyl]derivatives | 68609-97-2 | $>=2-<5$ |
|  | (Part B) 2-Propenenitrile, reaction products with 3a mino-1,5,5-trimethylc yc lohexa nemetha na mine | 90530-15-7 | $>=2-<5$ |
|  | (Part B) Isophoronedia mine | 2855-13-2 | $>=0-<1$ |
|  | (Part B) m-phenylenebis(methylamine) | 1477-55-0 | $>=0-<1$ |
| Sika floor®-260 ESD | (Part A) Quartz (SiO2) | 14808-60-7 | $>=30-<=60$ |
|  | (Part A) bisphenol-A-(epichlorhydrin) epoxy resin | 25068-38-6 | $>=30-<=60$ |
|  | (Part A) bisphenol-F-(epichlorhydrin) epoxy resin | 28064-14-4 | $>=5-<10$ |
|  | (Part A) oxirane, mono[(C12-14alkyloxy)methyl]derivatives | 68609-97-2 | $>=1-<5$ |
|  | (Part A) bisphenol-F-(epichlorhydrin) epoxy resin | 9003-36-5 | $>=1-<5$ |
|  | (Part A) p-tert-butylphenyl 1-(2,3-epoxy)propyl ether | 3101-60-8 | $>=1-<5$ |
|  | (Part A) Quartz (SiO2) < $<\mu \mathrm{m}$ | 14808-60-7 | $>=0.1-<1$ |
|  | (Part B) Benzyl alcohol | 100-51-6 | $>=10-<30$ |
|  | (Part B) Quatemary a mmonium compounds, C12-14 (even-numbered)-alkylethyld imethyl, ethyl sulphates | 68308-64-5 | $>=10-<30$ |
|  | (Part B) Isophoronediamine | 2855-13-2 | $>=10-<30$ |
|  | (Part B) 2-propenenitrile, reaction products with 2,2,4(or 2,4,4)-trimethyl-1,6-hexa nedia mine | 90530-20-4 | $>=10-<30$ |
|  | (Part B) bisphenol-A-(epic hlorhydrin) epoxy resin | 25068-38-6 | $>=5-<10$ |
|  | (Part B) m-phenylenebis(methylamine) | 1477-55-0 | $>=5-<10$ |
|  | (Part B) Phenol, 4-nonyl-, branc hed | 84852-15-3 | $>=1-<5$ |
|  | (Part B) 2,4,6-tris(dimethyla minomethyl)phenol | 90-72-2 | $>=1-<5$ |
|  | (Part B) 2,2,4(or 2,4,4)-trimethylhexane-1,6-dia mine | 25513-64-8 | $>=1-<5$ |
| Sika floor®-261 ${ }^{\text {ca }}$ | (Part A) bisphenol-A-(epichlorhydrin) epoxy resin | 25068-38-6 | $>=30-<40$ |
|  | (Part A) bisphenol-F-(epichlorhydrin) epoxy resin | 28064-14-4 | $>=2-<5$ |
|  | (Part A) oxirane, mono[(C12-14alkyloxy)methyl]derivatives | 68609-97-2 | $>=2-<5$ |
|  | (Part A) bisphenol-F-(epichlorhydrin) epoxy resin | 9003-36-5 | $>=1-<2$ |
|  | (Part A) p-tert-butylphenyl 1-(2,3-epoxy)propyl ether | 3101-60-8 | $>=1-<2$ |
|  | (Part B) Benzyl a lcohol | 100-51-6 | $>=40-<50$ |
|  | (Part B) Isophoronedia mine | 2855-13-2 | $>=10-<20$ |
|  | (Part B) m-phenylenebis(methylamine) | 1477-55-0 | $>=10-<20$ |
|  | (Part B) bisphenol-A-(epic hlorhydrin) epoxy resin | 25068-38-6 | $>=10-<20$ |
|  | (Part B) ethanol | 64-17-5 | $>=5-<10$ |
|  | (Part B) Phenol, 4-nonyl-, branched | 84852-15-3 | $>=5-<10$ |
|  | (Part B) 2,4,6-tris(dimethyla minomethyl)phenol | 90-72-2 | $>=2-<5$ |
|  | (Part B) 2-propenenitrile, reaction products with 2,2,4(or 2,4,4)-trimethyl-1,6-hexa nedia mine (TMD cyanethylated) | 90530-20-4 | $>=1-<2$ |
|  | (Part B) 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine | 25513-64-8 | $>=0-<1$ |


| Components | Ingredient ${ }^{1}$ | CASNO. | Concentration (\%w/w) |
| :---: | :---: | :---: | :---: |
| Sika floor®-270 ESD | (Part A) bisphenol-F-(epic hlormydrin) epoxy resin | 28064-14-4 | $>=50-<60$ |
|  | (Part A) Quartz (SiO2) | 14808-60-7 | $>=5-<10$ |
|  | (Part A) bisphenol-A-(epic hlorhydrin) epoxy resin | 25068-38-6 | $>=2-<5$ |
|  | (Part A) bisphenol-F-(epic hlormydrin) epoxy resin | 9003-36-5 | $>=0-<1$ |
|  | (Part A) p-tert-butylphenyl 1-(2,3-epoxy)propyl ether | 3101-60-8 | $>=0-<1$ |
|  | (Part B) Benzyl a lcohol | 100-51-6 | $>=40-<50$ |
|  | (Part B) Formaldehyde, polymer with benzenamine, hydrogenated | $\begin{aligned} & 135108-88- \\ & 2 \end{aligned}$ | $>=25-<35$ |
|  | (Part B) Aliphatic Amines | Not <br> Assigned | $>=5-<10$ |
|  | (Part B) 2,4,6-tris(dimethyla minomethyl)phenol | 90-72-2 | $>=2-<5$ |
|  | (Part B) cyclohex-1,2-ylenedia mine | 694-83-7 | $>=2-<5$ |
|  | (Part B) 4,4'-methylenebis(cyc lohexyla mine) | 1761-71-3 | $>=2-<5$ |
| Sika floor®-304 W <br> NA/Sika floor ${ }^{\circledR}$-305 <br> W NA | (Part B) Aliphatic polyisocyanate | 28182-81-2 | $>=90-<=100$ |
|  | (Part B) polyethyleneglycol tridec yl ether phosphate (Average EO =3-10 mol) | 9046-01-9 | $>=2-<5$ |
|  | (Part B) N,N-dimethylc yc lohexa na mine | 98-94-2 | $>=1-<2$ |
|  | (Part B) hexa methylene-di-iso cyanate | 822-06-0 | $>=0-<1$ |
| Sika floor®-31 NA PurCem ${ }^{\circledR}$ | (Part A) butane-1,4-diol | 110-63-4 | $>=1-<5$ |
|  | (Part B) Formaldehyde, oligomeric reaction products with aniline and phosgene | 32055-14-4 | $>=90-<=100$ |
|  | (Part C) Portland cement | 65997-15-1 | $>=50-<100$ |
|  | (Part C) Quartz (SiO2) $<5 \mu \mathrm{~m}$ | 14808-60-7 | $>=0.1-<1$ |
| Sika floor®-33 NA PurCem ${ }^{\circledR}$ | (Part A) butane-1,4-diol | 110-63-4 | $>=2-<5$ |
|  | (Part B) Aliphatic polyisocyanate | 28182-81-2 | $>=90-<=100$ |
|  | (Part B) bis(1,2,2,6,6-penta methyl-4-piperidyl) sebacate | 41556-26-7 | $>=0-<1$ |
|  | (Part B) hexa methylene-di-iso cyanate | 822-06-0 | $>=0-<1$ |
|  | (Part B) methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 82919-37-7 | $>=0-<1$ |
|  | (Part C) Quartz (SiO2) | 14808-60-7 | $>=40-<50$ |
|  | (Part C) Calc ium hydroxide | 1305-62-0 | $>=20-<25$ |
|  | (Part C) Quartz (SiO2) $<5 \mu \mathrm{~m}$ | 14808-60-7 | $>=10-<20$ |
| Sika floor ${ }^{\text {®-33 }} 3$ | (Part A) 2-ethylhexa ne-1,3-diol | 94-96-2 | $>=1-<2$ |
|  | (Part B) 4,4'-methylenediphenyl diisocyanate | 101-68-8 | $>=50-<60$ |
|  | (Part B) Aromatic iso cyanate-prepolymer | 9048-57-1 | $>=40-<50$ |
| Sikafloore-52 PC Grey | Portland cement | 65997-15-1 | $>=10-<20$ |
|  | Quartz (SiO2) | 14808-60-7 | $>=10-<20$ |
|  | Quart (SiO2) < $<$ mm | 14808-60-7 | $>=0.1-<1$ |
| Sikafloor®-53 PC White | Quartz (SiO2) | 14808-60-7 | $>=25-<50$ |
|  | Portland cement | 65997-15-1 | $>=20-<25$ |
|  | Quartz (SiO2) $<5 \mu \mathrm{~m}$ | 14808-60-7 | $>=2-<5$ |


| Components | Ingredient ${ }^{1}$ | CAS No. | Concentration (\%w/w) |
| :---: | :---: | :---: | :---: |
| Sikalastic ${ }^{\text {® }}-120$ FS <br> Primer | (Part A) bisphenol-A-(epic hlorhydrin) epoxy resin | 25068-38-6 | $>=55-<=65$ |
|  | (Part A) bisphenol-F-(epichlorhydrin) epoxy resin | 28064-14-4 | $>=10-<20$ |
|  | (Part A) oxirane, mono[(C12-14a lkyloxy)methyl]derivatives | 68609-97-2 | $>=10-<20$ |
|  | (Part B) Benzyl a lcohol | 100-51-6 | $>=40-<50$ |
|  | (Part B) m-phenylenebis(methylamine) | 1477-55-0 | $>=10-<20$ |
|  | (Part B) 2-piperazin-1-ylethyla mine | 140-31-8 | $>=10-<20$ |
|  | (Part B) 2,4,6-tris(dimethyla minomethyl)phenol | 90-72-2 | $>=5-<10$ |
|  | (Part B) 4,4'-isopropylidenediphenol | 80-05-7 | $>=5-<10$ |
|  | (Part B) Phenol, 4-nonyl-, branched | 84852-15-3 | $>=3-<5$ |
|  | (Part B) Salic ylic acid | 69-72-7 | $>=3-<5$ |
|  | (Part B) Isophoronediamine | 2855-13-2 | $>=2-<3$ |
|  | (Part B) Benzyld imethyla mine | 103-83-3 | $>=1-<2$ |
|  | (Part B) bis[(dimethyla mino)methyl]phenol | 71074-89-0 | $>=1-<2$ |
| Sika lastic ${ }^{\circledR}-220 \mathrm{FS}$ | (Part A) bisphenol-A-(epichlorhydrin) epoxy resin | 25068-38-6 | $>=80-<=90$ |
|  | (Part A) solvent naphtha (petroleum), heavy arom. | 64742-94-5 | $>=5-<10$ |
|  | (Part A) bisphenol-F-(epichlorhydrin) epoxy resin | 9003-36-5 | $>=1-<2$ |
|  | (Part A) p-tert-butylphenyl 1-(2,3-epoxy)propyl ether | 3101-60-8 | $>=1-<2$ |
|  | (Part A) naphtha lene | 91-20-3 | $>=0-<1$ |
|  | (Part B) Phenol, 4-nonyl-, branched | 84852-15-3 | $>=50-<60$ |
|  | (Part B) Benzyl a lcohol | 100-51-6 | $>=10-<20$ |
|  | (Part B) m-phenylenebis(methylamine) | 1477-55-0 | $>=5-<10$ |
|  | (Part B) 1,5-Dia mino-2-methylpentane | 15520-10-2 | $>=5-<10$ |
|  | (Part B) Polyoxypropylenedia mine (polymer) | 9046-10-0 | $>=5-<10$ |
|  | (Part B) 2,4,6-tris(dimethyla minomethyl)phenol | 90-72-2 | $>=3-<5$ |
|  | (Part B) 4-tert-Butylphenol | 98-54-4 | $>=3-<5$ |
|  | (Part B) Trimethylhexa methylenedia mine | 25620-58-0 | $>=0.1-<1$ |
| Sikalastic ${ }^{\circledR}$-390 Membrane | ethylbenzene | 100-41-4 | $>=0-<1$ |
| Sika la stic ${ }^{\circledR}$-391 N | 4,4'-methylenediphenyl diisoc ya nate | 101-68-8 | $>=40-<50$ |
|  | Diphenylmethanediisocyanate, isomeres and homologues | 9016-87-9 | $>=35-<45$ |
|  | o-(p-isocya na tobenzyl)phenyl isocyanate (MDI) | 5873-54-1 | $>=20-<25$ |

## 3. Scope of EPD

### 3.1. Functional unit

The functional unit of this cradle-to-grave EPD is defined asfollows:

## One square meter ( $\mathbf{1} \mathrm{m}^{2}$ ) of covered and protected flooring surface for a period of 60 years

To determine the amount of product needed to satisfy the functional unit, a service life is estimated. The values for the resinous and cementitious flooring systems are reported in Table 3. For each floor system, there are at least two different senvice life values: a technical service life, for which coating systems are designed for, and a market service life, a typical period after which users replace coating systems. Then, these values may differ depending on the applic ation, whether it is commercial or industrial.

Table 3: Estimated senvice life in years


### 3.2. System boundaries

This cradle-to-grave LCA includes modules related to the production, construction, use, and end-of-life stagesas shown in Table 4 and desc ribed in this section. All modules required by the PCR for resinous floor coatings from NSF were included. Figure 2 on page 19 shows the cradle-to-grave processes for resinous and cementitious floor coating systems included in this EPD.

Table 4: Life cycle stages included or not considered in the system boundaries

| Production stage |  |  | Construction stage |  | Use stage |  |  |  |  |  |  | End-of-life stage |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A1 | A2 | A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
|  |  | Manufacturing |  |  | $\frac{8}{3}$ |  | $$ |  |  | o 0 0 0 0 0 0 0 0 0 0 0 0 | $\begin{aligned} & 8 \\ & \frac{8}{2} \\ & \frac{0}{0} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  | Waste processing | $\begin{aligned} & \overline{\mathbb{O}} \\ & 0 \\ & \text { O } \\ & \overline{\hat{0}} \end{aligned}$ |  |
| x | $\mathbf{x}$ | $\mathbf{x}$ | X | X | X | X | X | X | X | X | X | x | X | X | x | $\frac{0}{\Sigma}$ |

Legend:
$X$ : considered in the system boundaries
MND: Module not declared

## A1 - RAW MATERIALSUPPLY

Coatings are composed of components made of many different ingredients (intermediate materials), such as epoxy for resinous components or cement and sand for cementitious components. They are manufactured in other parts of Canada, United States, Europe, South America, Asia and Australia. This module includesthe production of the ingredients needed forthe mixing at the Sika plants, including raw material extraction and transformation, and energy production.

## A2 - TRANSPORTTO MANUFACTURING PLANTS

Materials a re transported from suppliers to the Sika's manufacturing plants by truck, and boat if shipped from oversees. This module includes the transport air emissions as well as fuel, vehic le, and infrastructure production. Primary data on transportation distances and modes were used.

## A3- MANUFACTURING

This module covers the manufacturing of coating components, in liquid or powder form.
Once delivered to the Sika manufacturing plant, liquid materials for resinous components are stored until their use. Then, materials are mixed together in a tank according to a recipe. The mix goes under quality control, is packed in polyethylene (PE) or metallic pails and stored until shipping. Cardboard is also used forpackaging.
The manufacturing of cementitious components involves mainly powders. Powder ingredients are shipped to the Sika plant and stored until their use. Then, materials are mixed together with a powder mixer according to a recipe. The result goes under quality control, is packed in paperbags, and stored until shipping. Cardboard is also used during packaging.
Elec tric ity is the main source of energy used at the manufacturing plant. In Quebec and British Columbia, the electricity grid mix is mainly composed of hydroelectricity. Natural gas is used for heating.
Most of the liquid waste is generated at the mixing stations and is mainly sent to incineration. Solid waste (powders) is generated at the mixer and is mainly sent to recycling.

This module also includes the production and transport of primary packaging for the final products. Sika products are sold in a variety of packaging asdescribed in Table 5.

## Table 5: Packaging desc ription

| Packaging type | End-of-life treament | Mass (in kg) | Source | Biogenic carbon content** (kg C) |
| :---: | :---: | :---: | :---: | :---: |
| Paperbag (contains 25 kg ) | Landfill | 0.10 | Estimated | 0.05 |
| Paperbag (contains 25 kg ) | Landfill | 0.11 | Estimated | 0.055 |
| Cardboard box (contains $4 \times 4 \mathrm{l}$ ) | Landfill | 0.42 | Estimated | 0.21 |
| Metallic can (3.78 I) | Landfill* | 0.43 | Estimated | 0 |
| PE canister (4) | Landfill | 0.5 | Estimated | 0 |
| PEpail (10 I) | Landfill | 1.0 | Manufacturer | 0 |
| PEpail (201) | Landfill | 1.5 | Manufacturer | 0 |
| PE pail (5 I) | Landfill | 0.5 | Manufacturer | 0 |
| Metallic pail (12 I) | Landfill* | 0.77 | Manufacturer | 0 |
| Metallic pail (15I) | Landfill* | 0.88 | Manufacturer | 0 |
| Metallic pail (21) | Landfill* | 1.13 | Manufacturer | 0 |
| Metallic pail (7.56I) | Landfill* | 0.59 | Estimated | 0 |
| PE sleeve | Landfill | 0.13 | Estimated | 0 |

* Metallic containers may be recycled at the construction site, especially in a LEED project. However, it was judge that it would not be a representative case of how this packaging waste is usually treated.
** Source: ecoinvent (default 50 \%C-content assumption)


## A4 - Transport to site

Coating components, including their packaging, are transported from the manufacturing plant to their distributor wa rehouse and project sites by truck. This module includes the transport air emissions as well as fuel, vehicle, and infrastructure production. The default PCR transportation modes and distances were used.

## A5 - Installation

For the resinous and cementitious flooring systems, this module includes installing the floor coating system by applying the components on a floor substrate one after a nother. Each coat requires curing time, during which it is assumed that VOC content is emitted to air.

A small amount of product is not used and becomes waste. The production of this waste amount (modulesA1 to A4) is included in this module, but not itsdisposal, in conformance with the PCR forresinous floor coatings. The disposal of product packaging is included in this module.

B1 - Use
Once the product is cured, the use stage starts. No impacts associated to this module have been calculated.

## B2 - Maintenance

Although maintenance requirements can signific antly vary between systems, the same regularcleaning wasconsidered based on assumptions from the PCR for the resinous and cementitious flooring systems. It includes the production of the cleaning product.

## B3-Repair / B4 - Replacement / B5 - Refurbishment

It was assumed that repairs (module B3) are negligible during the whole product service lifetime and were therefore not considered for a ny system.

Recoats are needed to reach the 60-yearbuilding lifetime defined by the functional unit. Impacts of the replacement scenarios described in Table 6 for each system were calculated the same way as in the production and construction stages (A1 to A5 modules).

Table 6: Replacement scenarios of the resinous and cementitious flooring systems

| System | Replacementscenario |
| :---: | :---: |
| Sika Comfortfoor ${ }^{\text {® }}$ | Additional new top coat |
| Sika ComfortPoor ${ }^{\otimes}$ Pro | Additional new top coat |
| Sikafloor ${ }^{\circledR}$ Decoflake ${ }^{\circledR}$ | Additional new top coat |
| Sikafloor ${ }^{\circledR}$ ESD Control | Entire recoat |
| Sikafloor ${ }^{\circledR}$ Fastfor ${ }^{\circledR}$ CR | Additional new top coat |
| Sikafloor ${ }^{\circledR}$ Monitex | Additional new top coat |
| Sikafloor ${ }^{\circledR}$ PurCem ${ }^{\circledR}$ | Additional new top coat |
| Sikafloor ${ }^{\text {® }}$ Quartzite ${ }^{\text {® }}$ | Additional new top coat |
| Sikafloor ${ }^{\text {® }}$ Resoclad MRW Type II | Additional new top coat |
| Sikafloor ${ }^{\circledR}$ Terrazzo | Refresh polish and overcoat with new top coat |
| Sikafloor®-52 PC | Refresh polish and overcoat with new top coat |
| Sikafloor®-53 PC | Refresh polish and overcoat with new top coat |
| Skalastic ${ }^{\text {® }}$-3900 Traffic | Additional new top coat |
| Sikafloor ${ }^{\text {® }}$ Smooth Epoxy | Additional new top coat |

No impact was reported in module B5, since no refurbishment takesplace.
B6-Operational energy use and B7 - Operational water use
No impact was reported in these modules, since the floor systems consume neither energy nor water.

## C1 - Deconstruction/demolition

It is considered that no impact from the deconstruction or demolition are attributable to the studied products since it is not likely to be separated from the substrate and recovered from deconstruction or demolition waste.

## C2 - WASTE TRANSPORT

Applied coatings are transported to landfill as well as water-based unused coatings from installation (A5 and B1) and replacements (B4). Unused solvent-based coatings from these modules are sent to inc ineration for energy recovery. This module includes the transport air emissions as well as fuel, vehicle, and infrastructure production. The default PCR transportation modes and distances were used.


Figure 2: Process flow for all life cycle modules considered

## C3 - Waste processing

All unused solvent-based coatingsfrom the A5 and B4 modulesare assumed to be incinerated forenergy recovery at theirend of life. Creditsforenergy recovery are considered negligible and are not accounted for in module D.

C4 - DISPOSAL
All applied coatings are assumed to be sent to landfill as well as unused water-based coatings from the A5 and B4 modules.

### 3.3. Geographical and temporal boundaries

The geographical boundaries are representative of current equipment and processes associated with resinous and cementitious floor coating system manufacturing, use and disposal in Canada. Since the data were collected for the year 2017, they are considered temporally representative (i.e. less than 5 years old). All data were modelled using the ecoinvent 3.4 database released in 2017 (ecoinvent, 2017), which meetsthe PCR requirements. A weighed average of production volume at each location isutilized forcalculation puposes.

## 4. Potential environmental impacts assessment

This cradle-to-grave life cycle assessment has been conducted according to ISO 14040 and 14044 standards and the PCR for Resinous Floor Coatings (NSF, 2018). Potential environmental impacts were calculated with the impact assessment method TRACI 2.1 (US EPA, 2012). The description of these indic ators reported are provided in the glossary (section 6.2).

### 4.1. Assumptions

When specific data was not a vailable, generic data which fulfilled the minimum criteria of the PCR were used. The ecoinvent database v3.4 recycled content allocation served as the main source of secondary data. It should be noted that most, though not all, of the data within ecoinvent is of European orig in and developed to represent European industrial conditions and processes. Therefore, in some cases, these moduleswere furtheradapted in order to enhance their representativeness of the products and contexts being examined. However, in the recent updates of the ecoinvent database, a lot of efforts have been put into creating market groups for regions, countries and products. Other assumptions included in this LCA were related to raw material modelling, colours and transportation.

### 4.2. Criteria for the exclusion of inputs and outputs

Processes or elementary flows may be excluded if the life cycle inventory (LCI) data amounts to a minimum of $95 \%$ of total inflows in terms of mass and energy to the upstream and core module. The following processes were excluded from the study due to their expected low contribution and the lack of readily a vailable data:

- Personnel impacts
- Research and development activities
- Businesstravel
- Any secondary packaging
- All point of sale infrastructure
- Coating applicator


### 4.3. Data quality

Data sources
Specific data were collected from Sika Canada for operationsoccuring in 2017 (less than 5 years old). Generic data collected for the upstream and downstream stages were representative of the Conadian context and technologies used.

The LCA model was developed with the SimaPro 8.5 software using ecoinvent 3.4 database, which was released in 2017 (less than 2 years). Since most of the data within ecoinvent is of European origin and produced to represent European industrial conditions and processes, several data were adapted to enhance their representativeness of the products and contexts being assessed.

## Data quality

The overall data quality ratings show that the data used were good. This data quality assessment confirms the high reliability, representativeness (technological, geographical and time-related), completeness, a nd consistency of the information and data used for this study.

### 4.4. Allocation

Allocation of multi-output processes
When unavoidable allocation was done by mass, or other physical relationship. Economic value a llocation was not used.

Allocation at Sika's manufacturing plant
Sika's plants produce many different products, including several that are not part of the scope of this study. Product ingredients were available foreach product and did not need to be allocated. However, general inputssuch aselectric ity, naturalgas, and waterwere allocated based on the production volume in tonnes. Percentages were calculated by the ma nufac turers through the data collection.

Allocation for end-of-life processes
As stated in the PCR, a recycled content approach (i.e. cut-off approach) was applied when a product is recycled. The impacts associated with the recycling process are thus attributed to the products using these materials.
ecoinvent processes with allocation
Many of the processes in the ecoinvent database also provide multiple functions, and allocation is required to provide inventory data perfunction (orperprocess). Thisstudy a cceptsthe allocation method used by ecoinvent for those processes. The ecoinvent system model used was "Allocation, cut-off". It should be noted that the allocation methodsused in ecoinvent forbackground processes (i.e. processes representing the complete supply chain of a good or service used in the life cycle of a floor covering system) may be inconsistent with the approach used to model the foreground system (i.e. to model the manufacturing of a floor covering system with data collected in the literature and from manufacturers). While this allocation is appropriate for foreground processes, continuation of this methodology into the background datasets would add complexity without substantially improving the quality of the study.

### 4.5. Life cycle impact assessment - results

The following tables (6 to 59) present the results for $1 \mathrm{~m}^{2}$ of floor coating systems over the production, use, and end-of-life stages (A to $C$ ) according to each estimated service life in Table 3. Cradle-to-gate results (modules A1 to A3) of individual components are presented in a ppendix.

Table 7
Product: Sika ComfortFoor® ${ }^{\circledR}$ Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor coating system (cradle-to-grave)
Estimated market service life: $\mathbf{2 0}$ years


ADPfosi,M Abiotic depletion potential for fossil resourcesused as materials
Note: "E $\pm$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for informational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values

## Table 8

Product: Sika ComfortFoor ${ }^{\circledR}$ Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technic al servic e life: $\mathbf{3 0}$ years


ADP fossi,M Abiotic depletion potential for fossil resources used as materials
Note: "E $\pm$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared.
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 9
Product: Sika ComfortFoor ${ }^{\circledR}$ Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{1 0}$ years


ADP fossi,M Abiotic depletion potential for fossil resources used as materials
Note: "E $\pm$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared.
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems| Environmental Product Declaration (EPD) \#2068-2738

Table 10
Product: Sika ComfortFoor ${ }^{\circledR}$ Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technic al service life: $\mathbf{1 5}$ years


ADPfossi,M Abiotic depletion potential for fossil resources used as materials
Note: "E $\pm$ " means " $\times 10 \pm$ ". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared.
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

## Table 11

Product: Sika ComfortFoor ${ }^{\circledR}$ Pro Application: commercial and industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market and technic al service life: $\mathbf{3 0}$ years


ADPfossil,M Abiotic depletion potential for fossil resources used as materials
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for informational puposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems| Environmental Product Declaration (EPD) \#2068-2738

## Table 12

Product: Sika Comfortfoor ${ }^{\circledR}$ Pro Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: 60 years


ADPfossil, Abiotic depletion potential for fossil resourcesused as materials
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for informational puposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems| Environmental Product Declaration (EPD) \#2068-2738

## Table 13

Product: Sika ComfortFoor ${ }^{\circledR}$ Pro Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{2 0}$ years

| Indicators | Units | Total | A1-3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | 87 | C1 | C2 | C3 | C4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | $\mathrm{kg} \mathrm{CO}_{2} \mathrm{eq}$. | 4.77E+1 | 4.29E+1 | $1.45 \mathrm{E}+0$ | 9.16E-1 | 0 | 1.16E+0 | 0 | 1.23E+0 | 0 | 0 | 0 | 0 | 7.60E-2 | 0 | 2.74E-3 |
| AP | kg SO 2 eq . | $2.36 \mathrm{E}-1$ | $2.08 \mathrm{E}-1$ | 9.80E-3 | $4.48 \mathrm{E}-3$ | 0 | $6.40 \mathrm{E}-3$ | 0 | 7.73E-3 | 0 | 0 | 0 | 0 | 4.36E-4 | 0 | 2.62E-6 |
| EP | $\mathrm{kg} \mathrm{N} \mathrm{eq}$. | $1.11 \mathrm{E}-1$ | 9.42E-2 | 2.06E-3 | 2.17E-3 | 0 | $8.53 \mathrm{E}-3$ | 0 | $4.00 \mathrm{E}-3$ | 0 | 0 | 0 | 0 | 6.24E-5 | 0 | 2.90E-4 |
| SPP | $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | 3.16E+0 | 2.55E+0 | $2.64 \mathrm{E}-1$ | $1.52 \mathrm{E}-1$ | 0 | 5.84E-2 | 0 | $1.17 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | $1.19 \mathrm{E}-2$ | 0 | 6.07E-5 |
| ODP | kg CFC-11 eq. | 1.37E-6 | 8.04E-7 | 3.47E-7 | $2.78 \mathrm{E}-8$ | 0 | $6.14 \mathrm{E}-8$ | 0 | $1.08 \mathrm{E}-7$ | 0 | 0 | 0 | 0 | 1.83E-8 | 0 | $1.16 \mathrm{E}-10$ |
| Resource use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NRPRE | MJ | $6.06 \mathrm{E}+2$ | 5.40E+2 | 2.21E+1 | $1.16 \mathrm{E}+1$ | 0 | $1.83 \mathrm{E}+1$ | 0 | $1.31 \mathrm{E}+1$ | 0 | 0 | 0 | 0 | 1.09E+0 | 0 | $2.84 \mathrm{E}-1$ |
| NRPRM | kg | 6.99E+0 | 6.59E+0 | 0 | $1.32 \mathrm{E}-1$ | 0 | 0 | 0 | $2.68 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPRE | MJ | $3.72 \mathrm{E}+1$ | $2.88 \mathrm{E}+1$ | 3.16E-1 | $6.40 \mathrm{E}-1$ | 0 | 6.26E+0 | 0 | 1.12E+0 | 0 | 0 | 0 | 0 | 5.14E-3 | 0 | 7.29E-3 |
| RPRM | kg | $2.89 \mathrm{E}-1$ | $1.34 \mathrm{E}-2$ | 0 | $2.69 \mathrm{E}-4$ | 0 | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REDwps | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADP frosil, $^{\text {E }}$ | MJ | 5.08E+2 | $4.48 \mathrm{E}+2$ | 2.17E+1 | $9.72 \mathrm{E}+0$ | 0 | $1.65 \mathrm{E}+1$ | 0 | 1.12E+1 | 0 | 0 | 0 | 0 | $1.08 \mathrm{E}+0$ | 0 | $2.79 \mathrm{E}-1$ |
| ADP ${ }_{\text {fossil, }}$ M | kg | 6.99E+0 | 6.59E+0 | 0 | $1.32 \mathrm{E}-1$ | 0 | 0 | 0 | $2.68 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SM | kg | $2.75 \mathrm{E}+0$ | $2.70 \mathrm{E}+0$ | 0 | $5.40 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | $\mathrm{m}^{3}$ | $1.03 \mathrm{E}+0$ | 8.61E-1 | 4.51E-3 | $1.77 \mathrm{E}-2$ | 0 | $1.28 \mathrm{E}-1$ | 0 | 2.11E-2 | 0 | 0 | 0 | 0 | 1.34E-4 | 0 | 3.14E-4 |
| Waste* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HWD | kg | 6.36E-3 | $2.08 \mathrm{E}-3$ | 0 | 4.16E-5 | 0 | 0 | 0 | 4.24E-3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NHWD | kg | $2.32 \mathrm{E}+0$ | 0 | 0 | $4.53 \mathrm{E}-1$ | 0 | 0 | 0 | 2.72E-2 | 0 | 0 | 0 | 0 | 0 | 0 | $1.84 \mathrm{E}+0$ |
| HLRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IWRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legend |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP G | Global warming potential (GWP ${ }_{100}$ ) |  |  |  |  | SM Sec |  | Secondary materials |  |  |  | B1 Use |  |  |  |  |
| AP A | Acidific ation potential |  |  |  |  | RSF Re |  | Renewable secondary fuels |  |  |  | B2 | Maintenance |  |  |  |
| EP Eut | Eutrophication potential |  |  |  |  | NRSF N |  | Non-renewable secondary fuels |  |  |  | B3 | Repair |  |  |  |
| SFP S | Smog formation potential |  |  |  |  | FW C |  | Consumption of fresh water |  |  |  | B4 | Replacement |  |  |  |
| ODP O | Ozone depletion potential |  |  |  |  | HWD H |  | Hazardous waste disposed |  |  |  | B5 | Refurbishment |  |  |  |
| NRPRE ${ }_{\text {E }}$ | Non-renewable primary resources used as an energy camier |  |  |  |  |  | NHWD N | Non-hazardous waste disposed |  |  |  | B6 | Operational energy use |  |  |  |
| NRPRM | Non-renewable primary resources with energy content used as a material |  |  |  |  |  | HLRW Hit | High-level radioactive waste |  |  |  | B7 | Operational water use |  |  |  |
| RPRE R | Renewable primary resources used as an energy camier |  |  |  |  |  | ILRW In | Intermediate/low-level radioactive waste |  |  |  | C1 | De-construction/Demolition |  |  |  |
| RPRM R | Renewable primary resources with energy content used as a materialRecovered energy from disposal of waste in previous systems |  |  |  |  | A1-3 P |  | Production stage |  |  |  | C2 | Transport |  |  |  |
| REDwps R |  |  |  |  |  | A4 $\begin{array}{ll}\text { A5 } & \text { Tra } \\ \end{array}$ |  | Transport to site |  |  |  | C3 | Waste processing |  |  |  |
| $\mathrm{ADP}_{\text {fossil, }}$ A | Abiotic depletion potential for fossil resources used as energy |  |  |  |  |  |  | Installation |  |  |  | C4 | Disposal |  |  |  |

ADP fossi,M Abiotic depletion potential for fossil resources used as materials
Note: "E $\pm$ " " means " $\times 10 \pm$ ". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems|Environmental Product Declaration (EPD) \#2068-2738

Table 14
Product: Sikafloor ${ }^{\circledR}$ Decoflake ${ }^{\circledR}$ System Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{2 0}$ years


ADP ${ }_{\text {fossi,M }}$ Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \Psi$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurently exist within the LCI data used to generate waste metricsforlife cycle assessmentsand environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems| Environmental Product Declaration (EPD) \#2068-2738

## Table 15

Product: Sikafloor ${ }^{\circledR}$ Dec oflake ${ }^{\circledR}$ System Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: $\mathbf{3 0}$ years

| Indicators | 5 Units | Total | A1-3 | A4 | A5 | B1 | B2 | 83 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | $\mathrm{kg} \mathrm{CO}_{2} \mathrm{eq}$. | 1.73E+1 | 1.29E+1 | 6.16E-1 | $2.79 \mathrm{E}-1$ | 0 | 1.16E+0 | 0 | 2.24E+0 | 0 | 0 | 0 | 0 | 8.10E-2 | 4.60E-2 | $1.22 \mathrm{E}-3$ |
| AP | $\mathrm{kg} \mathrm{SO}_{2} \mathrm{eq}$. | 8.73E-2 | 6.51E-2 | 4.14E-3 | $1.40 \mathrm{E}-3$ | 0 | $6.40 \mathrm{E}-3$ | 0 | 9.74E-3 | 0 | 0 | 0 | 0 | $4.64 \mathrm{E}-4$ | 3.85E-6 | $1.30 \mathrm{E}-6$ |
| EP | $\mathrm{kg} \mathrm{N} \mathrm{eq}$. | $5.35 \mathrm{E}-2$ | 3.48E-2 | 8.80E-4 | 8.87E-4 | 0 | $8.53 \mathrm{E}-3$ | 0 | 8.18E-3 | 0 | 0 | 0 | 0 | $6.65 \mathrm{E}-5$ | 8.49E-6 | $1.27 \mathrm{E}-4$ |
| SPP | $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | $1.29 \mathrm{E}+0$ | 7.09E-1 | 1.11E-1 | 2.41E-1 | 0 | 5.84E-2 | 0 | $1.63 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 1.27E-2 | $1.15 \mathrm{E}-4$ | 3.03E-5 |
| ODP | kg CFC-11 eq. | $1.68 \mathrm{E}-6$ | 1.11E-6 | 1.47E-7 | $2.57 \mathrm{E}-8$ | 0 | $6.14 \mathrm{E}-8$ | 0 | $3.21 \mathrm{E}-7$ | 0 | 0 | 0 | 0 | $1.95 \mathrm{E}-8$ | 4.04E-11 | 5.90E-11 |
| Resource use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NRPRE | MJ | 2.18E+2 | $1.58 \mathrm{E}+2$ | 9.37E+0 | 3.40E+0 | 0 | $1.83 \mathrm{E}+1$ | 0 | $2.75 \mathrm{E}+1$ | 0 | 0 | 0 | 0 | 1.16E+0 | 3.61E-3 | $2.97 \mathrm{E}-1$ |
| NRPRM | kg | 2.95E+0 | $2.47 \mathrm{E}+0$ | 0 | 4.94E-2 | 0 | 0 | 0 | 4.27E-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPRE | MJ | $1.78 \mathrm{E}+1$ | 9.41E+0 | 1.35E-1 | $1.96 \mathrm{E}-1$ | 0 | $6.26 \mathrm{E}+0$ | 0 | 1.77E+0 | 0 | 0 | 0 | 0 | $5.47 \mathrm{E}-3$ | 1.12E-4 | $7.63 \mathrm{E}-3$ |
| RPRM | kg | $2.80 \mathrm{E}-1$ | 5.22E-3 | 0 | $1.04 \mathrm{E}-4$ | 0 | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REDups | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADP frosil, $^{\text {E }}$ | MJ | $1.89 \mathrm{E}+2$ | $1.34 \mathrm{E}+2$ | 9.22E+0 | 2.92E+0 | 0 | $1.65 \mathrm{E}+1$ | 0 | 2.49E+1 | 0 | 0 | 0 | 0 | 1.16E+0 | 3.52E-3 | 2.93E-1 |
| ADP ${ }_{\text {fossil, }}$ M | kg | $2.95 \mathrm{E}+0$ | $2.47 \mathrm{E}+0$ | 0 | 4.94E-2 | 0 | 0 | 0 | 4.27E-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SM | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | $\mathrm{m}^{3}$ | $3.41 \mathrm{E}-1$ | 1.77E-1 | 1.92E-3 | 3.60E-3 | 0 | $1.28 \mathrm{E}-1$ | 0 | 3.01E-2 | 0 | 0 | 0 | 0 | $1.43 \mathrm{E}-4$ | $3.47 \mathrm{E}-6$ | $3.29 \mathrm{E}-4$ |
| Waste* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HWD | kg | 3.34E-2 | $2.69 \mathrm{E}-2$ | 0 | 5.38E-4 | 0 | 0 | 0 | 5.92E-3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NHWD | kg | 2.02E+0 | 0 | 0 | $6.46 \mathrm{E}-2$ | 0 | 0 | 0 | $1.19 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 0 | 0 | $1.94 \mathrm{E}+0$ |
| HLRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IШRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legend |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | Global warming potential ( $\mathrm{GWP}_{100}$ ) |  |  |  |  | SM Se |  | Secondary materials |  |  |  | B1 | Use |  |  |  |
| AP | Acidification potential |  |  |  |  |  | RSF Re | Renewable secondary fuels |  |  |  | B2 | Maintenance |  |  |  |
| EP |  |  |  |  |  |  | NRSF No | Non-renewable secondary fuels |  |  |  | B3 | Repair |  |  |  |
| SFP | Smog formation potential |  |  |  |  |  | FW Con | Consumption of fresh water |  |  |  | B4 | Replacement |  |  |  |
| ODP | Ozone depletion potential |  |  |  |  |  | HWD Ha | Hazardous waste disposed |  |  |  | B5 | Refurbishment |  |  |  |
| NRPRE | Non-renewable primary resources used as an energy camier |  |  |  |  |  | NHWD No | Non-hazardous waste disposed |  |  |  | B6 | Operational energy use |  |  |  |
| NRPRM | Non-renewable primary resources with energy content used as a material |  |  |  |  |  | HLRW Hig | High-level radioactive waste |  |  |  | B7 | Operational water use |  |  |  |
| RPRE | Renewable primary resources used as an energy camier |  |  |  |  |  | IШRW Int | Intermediate/low-level radioactive waste |  |  |  | C1 | De-construction/Demolition |  |  |  |
| RPRM | Renewable primary resources with energy content used as a material |  |  |  |  |  | A1-3 Prod | Production stage |  |  |  | C2 | Transport |  |  |  |
| RE ${ }_{\text {dwps }}$ | Recovered energy from disposal of waste in previous systems |  |  |  |  |  | A4 $\begin{aligned} & \text { A5 }\end{aligned}$ | Transport to site |  |  |  | C3 | Waste processing |  |  |  |
| ADP fossil, $^{\text {E }}$ | Abiotic depletion potential for fossil resourcesused as energy |  |  |  |  |  |  | Installation |  |  |  | C4 | Disposal |  |  |  |
| Note: " $\mathrm{E} \pm$ " means " $\times 10 \pm$ ". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared. <br>  <br>  should be derived from these reported values. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Sika Canada | Sika Resinous \& Cementitious Flooring Systems | Environmental Product Declaration (EPD) \#2068-2738

## Table 16

Product: Sikafloor ${ }^{\circledR}$ Decoflake ${ }^{\circledR}$ System Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{1 0}$ years


ADP ${ }_{\text {fossil,M }}$ Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \Psi$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurently exist within the LCI data used to generate waste metricsforlife cycle assessmentsand environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems| Environmental Product Declaration (EPD) \#2068-2738

Table 17
Product: Sikafloor ${ }^{\circledR}$ Decoflake ${ }^{\circledR}$ System Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: $\mathbf{1 5}$ years


ADPfossil, Abiotic depletion potential for fossil resources used as materials
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for informational puposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems|Environmental Product Declaration (EPD) \#2068-2738

## Table 18

Product: Sikafloor ${ }^{\circledR}$ ESD C ontrol System Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{1 0}$ years


ADPfossi,M Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \Psi$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurently exist within the LCI data used to generate waste metricsforlife cycle assessmentsand environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

## Table 19

Product: Sikafloor ${ }^{\circledR}$ ESD C ontrol System Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: $\mathbf{1 5}$ years

| Indicators | 5 Units | Total | A1-3 | A4 | A5 | B1 | B2 | 83 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | $\mathrm{kg} \mathrm{CO}_{2} \mathrm{eq}$. | 2.20E+1 | 4.87E+0 | 1.74E-1 | $1.03 \mathrm{E}-1$ | 0 | 1.16E+0 | 0 | 1.54E+1 | 0 | 0 | 0 | 0 | $2.06 \mathrm{E}-1$ | $6.44 \mathrm{E}-2$ | 7.37E-3 |
| AP | $\mathrm{kg} \mathrm{SO}_{2} \mathrm{eq}$. | $1.11 \mathrm{E}-1$ | 2.41E-2 | 1.17E-3 | 5.19E-4 | 0 | $6.40 \mathrm{E}-3$ | 0 | $7.74 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | $1.18 \mathrm{E}-3$ | 5.38E-6 | 5.89E-6 |
| EP | $\mathrm{kg} \mathrm{N} \mathrm{eq}$. | 8.83E-2 | 1.91E-2 | $2.47 \mathrm{E}-4$ | 3.93E-4 | 0 | $8.53 \mathrm{E}-3$ | 0 | 5.91E-2 | 0 | 0 | 0 | 0 | $1.69 \mathrm{E}-4$ | $1.19 \mathrm{E}-5$ | 7.96E-4 |
| SPP | $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | 1.69E+0 | 2.80E-1 | 3.15E-2 | 8.72E-2 | 0 | 5.84E-2 | 0 | $1.20 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 3.23E-2 | $1.61 \mathrm{E}-4$ | $1.36 \mathrm{E}-4$ |
| ODP | kg CFC-11 eq. | $2.71 \mathrm{E}-6$ | 5.96E-7 | 4.16E-8 | $1.32 \mathrm{E}-8$ | 0 | 6.14E-8 | 0 | $1.95 \mathrm{E}-6$ | 0 | 0 | 0 | 0 | $4.95 \mathrm{E}-8$ | 5.65E-11 | 2.53E-10 |
| Resource use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NRPRE | MJ | 2.81E+2 | 6.09E+1 | $2.64 \mathrm{E}+0$ | $1.31 \mathrm{E}+0$ | 0 | $1.83 \mathrm{E}+1$ | 0 | 1.95E+2 | 0 | 0 | 0 | 0 | 2.96E+0 | 5.06E-3 | $7.64 \mathrm{E}-1$ |
| NRPRM | kg | 3.51E+0 | 8.60E-1 | 0 | $1.72 \mathrm{E}-2$ | 0 | 0 | 0 | $2.63 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPRE | MJ | 2.46E+1 | 4.45E+0 | 3.79E-2 | 9.57E-2 | 0 | $6.26 \mathrm{E}+0$ | 0 | 1.37E+1 | 0 | 0 | 0 | 0 | $1.39 \mathrm{E}-2$ | $1.56 \mathrm{E}-4$ | $1.96 \mathrm{E}-2$ |
| RPRM | kg | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REDups | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADP frosil, $^{\text {E }}$ | MJ | $2.57 \mathrm{E}+2$ | $5.54 \mathrm{E}+1$ | $2.60 \mathrm{E}+0$ | $1.19 \mathrm{E}+0$ | 0 | $1.65 \mathrm{E}+1$ | 0 | 1.77E+2 | 0 | 0 | 0 | 0 | 2.94E+0 | 4.93E-3 | 7.52E-1 |
| ADP ${ }_{\text {fossil, }}$ M | kg | 3.51E+0 | 8.60E-1 | 0 | $1.72 \mathrm{E}-2$ | 0 | 0 | 0 | 2.63E+0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SM | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | $\mathrm{m}^{3}$ | $4.21 \mathrm{E}-1$ | 7.10E-2 | 5.41E-4 | $1.47 \mathrm{E}-3$ | 0 | $1.28 \mathrm{E}-1$ | 0 | $2.19 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | $3.64 \mathrm{E}-4$ | 4.85E-6 | $8.44 \mathrm{E}-4$ |
| Waste* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HWD | kg | $6.46 \mathrm{E}-2$ | 1.58E-2 | 0 | 3.17E-4 | 0 | 0 | 0 | 4.85E-2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NHWD | kg | 5.15E+0 | 0 | 0 | $4.74 \mathrm{E}-2$ | 0 | 0 | 0 | $1.42 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | $4.96 \mathrm{E}+0$ |
| HLRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IШRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legend |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | Global warming potential ( $\mathrm{GWP}_{100}$ ) |  |  |  |  | SM Se |  | Secondary materials |  |  |  | B1 | Use |  |  |  |
| AP | Acidification potential |  |  |  |  |  | RSF Re | Renewable secondary fuels |  |  |  | B2 | Maintenance |  |  |  |
| EP | Eutrophication potential |  |  |  |  |  | NRSF No | Non-renewable secondary fuels |  |  |  | B3 | Repair |  |  |  |
| SFP | Smog formation potential |  |  |  |  |  | FW Con | Consumption of fresh water |  |  |  | B4 | Replacement |  |  |  |
| ODP | Ozone depletion potential |  |  |  |  |  | HWD Ha | Hazardous waste disposed |  |  |  | B5B6 | Refurbishment |  |  |  |
| NRPRE | Non-renewable primary resources used as an energy camier |  |  |  |  |  | NHWD No | Non-hazardous waste disposed |  |  |  |  | Operational energy use |  |  |  |
| NRPRM | Non-renewable primary resources with energy content used as a material |  |  |  |  |  | HLRW H | High-level radioactive waste |  |  |  | B6 B7 | Operational water use |  |  |  |
| RPRE | Renewable primary resources used as an energy camier |  |  |  |  |  | ILRW In | Intermediate/low-level radioactive waste |  |  |  | B7 C 1 | De-construction/Demolition |  |  |  |
| RPRM | Renewable primary resources with energy content used asa material |  |  |  |  |  | A1-3 Pr | Production stage |  |  |  | $\begin{aligned} & \mathrm{C} 1 \\ & \mathrm{C} 2 \end{aligned}$ | Transport |  |  |  |
| RE ${ }_{\text {dwps }}$ | Recovered energy from disposal of waste in previous systems |  |  |  |  |  | A4 $\begin{aligned} & \text { A5 }\end{aligned}$ | Transport to site |  |  |  | C2 C3 | Waste p | cessing |  |  |
| ADP fossil, $^{\text {E }}$ | Abiotic depletion potential for fossil resourcesused as energy |  |  |  |  |  |  | Installation |  |  |  | C3 C4 | Disposal |  |  |  |
| Note: " $\mathrm{E} \pm$ " means " $\times 10 \pm$ ". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared. <br>  <br>  should be derived from these reported values. $\qquad$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Sika Canada | Sika Resinous \& Cementitious Flooring Systems|Environmental Product Declaration (EPD) \#2068-2738

Table 20
Product: Sikafloor ${ }^{\circledR}$ ESD Control System Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market and technic al service life: $\mathbf{5}$ years


ADPfossil, Abiotic depletion potential for fossil resources used as materials
*Significant data limitationscurrently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for informational puposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 21
Product: Skafloor ${ }^{\circledR}$ Fastflor ${ }^{\circledR}$ CR Broadcast Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor coating system (cradle-to-grave)
Estimated market service life: $\mathbf{2 0}$ years


ADP fossi,M Abiotic depletion potential for fossil resourcesused as materials
Note: " $\mathrm{E} \pm$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 22
Product: Sikafloor ${ }^{\circledR}$ Fastfor ${ }^{\circledR}$ CR Broadcast Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: $\mathbf{3 0}$ years

| Indicators | Units | Total | A1-3 | A4 | A5 | B1 | B2 | 83 | B4 | B5 | B6 | 87 | C1 | C2 | C3 | C4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | $\mathrm{kg} \mathrm{CO}_{2} \mathrm{eq}$. | $1.24 \mathrm{E}+1$ | 8.69E+0 | 5.97E-1 | $1.90 \mathrm{E}-1$ | 0 | 1.16E+0 | 0 | $1.65 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 7.57E-2 | 0 | 1.85E-3 |
| AP | kg SO 2 eq . | $6.40 \mathrm{E}-2$ | $4.38 \mathrm{E}-2$ | 4.02E-3 | 9.79E-4 | 0 | 6.40E-3 | 0 | 8.38E-3 | 0 | 0 | 0 | 0 | 4.34E-4 | 0 | 2.27E-6 |
| EP | $\mathrm{kg} \mathrm{N} \mathrm{eq}$. | 5.06E-2 | $3.39 \mathrm{E}-2$ | 8.52E-4 | 7.07E-4 | 0 | 8.53E-3 | 0 | $6.37 \mathrm{E}-3$ | 0 | 0 | 0 | 0 | 6.21E-5 | 0 | 1.89E-4 |
| SPP | $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | 8.01E-1 | $4.85 \mathrm{E}-1$ | 1.08E-1 | 3.68E-2 | 0 | 5.84E-2 | 0 | 1.02E-1 | 0 | 0 | 0 | 0 | $1.19 \mathrm{E}-2$ | 0 | 5.30E-5 |
| ODP | kg CFC-11 eq. | 1.62E-6 | $1.15 \mathrm{E}-6$ | $1.43 \mathrm{E}-7$ | 2.67E-8 | 0 | $6.14 \mathrm{E}-8$ | 0 | $2.24 \mathrm{E}-7$ | 0 | 0 | 0 | 0 | 1.82E-8 | 0 | $1.05 \mathrm{E}-10$ |
| Resource use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NRPRE | MJ | $1.56 \mathrm{E}+2$ | 1.05E+2 | 9.07E+0 | 2.34E+0 | 0 | 1.83E+1 | 0 | 2.01E+1 | 0 | 0 | 0 | 0 | 1.09E+0 | 0 | 2.81E-1 |
| NRPRM | kg | $1.91 \mathrm{E}+0$ | 1.59E+0 | 0 | 3.17E-2 | 0 | 0 | 0 | 2.97E-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPRE | MJ | 1.51E+1 | 7.22E+0 | $1.31 \mathrm{E}-1$ | $1.58 \mathrm{E}-1$ | 0 | 6.26E+0 | 0 | $1.35 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 5.12E-3 | 0 | 7.23E-3 |
| RPRM | kg | $2.85 \mathrm{E}-1$ | 1.02E-2 | 0 | $2.04 \mathrm{E}-4$ | 0 | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REDups | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADP frosil, $^{\text {E }}$ | MJ | $1.42 \mathrm{E}+2$ | 9.47E+1 | 8.93E+0 | 2.13E+0 | 0 | $1.65 \mathrm{E}+1$ | 0 | 1.82E+1 | 0 | 0 | 0 | 0 | $1.08 \mathrm{E}+0$ | 0 | $2.77 \mathrm{E}-1$ |
| ADP ${ }_{\text {fossil, }}$ M | kg | $1.91 \mathrm{E}+0$ | 1.59E+0 | 0 | 3.17E-2 | 0 | 0 | 0 | 2.97E-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SM | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | $\mathrm{m}^{3}$ | 2.81E-1 | $1.25 \mathrm{E}-1$ | 1.86E-3 | $2.60 \mathrm{E}-3$ | 0 | $1.28 \mathrm{E}-1$ | 0 | $2.29 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 1.34E-4 | 0 | 3.11E-4 |
| Waste* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HWD | kg | $2.65 \mathrm{E}-2$ | 2.20E-2 | 0 | 4.40E-4 | 0 | 0 | 0 | 4.12E-3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NHWD | kg | 1.93E+0 | 0 | 0 | 7.99E-2 | 0 | 0 | 0 | 1.38E-2 | 0 | 0 | 0 | 0 | 0 | 0 | $1.84 \mathrm{E}+0$ |
| HLRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IWRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legend |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP G | Global warming potential (GWP ${ }_{100}$ ) |  |  |  |  | SM Sec |  | Secondary materials |  |  |  | B1 Use |  |  |  |  |
| AP A | Acidific ation potential |  |  |  |  | RSF Re |  | Renewable secondary fuels |  |  |  | B2 | Maintenance |  |  |  |
| EP Eut | Eutrophication potential |  |  |  |  | NRSF N |  | Non-renewable secondary fuels |  |  |  | B3 | Repair |  |  |  |
| SFP S | Smog formation potential |  |  |  |  | FW C |  | Consumption of fresh water |  |  |  | B4 | Replacement |  |  |  |
| ODP O | Ozone depletion potential |  |  |  |  | HWD H |  | Hazardous waste disposed |  |  |  | B5 | Refurbishment |  |  |  |
| NRPRE ${ }_{\text {E }}$ | Non-renewable primary resourcesused as an energy camier |  |  |  |  | NHWD N |  | Non-hazardous waste disposed |  |  |  | B6 | Operational energy use |  |  |  |
| NRPRM | Non-renewable primary resources with energy content used asa material |  |  |  |  | HLRW H |  | High-level radioactive waste |  |  |  | B7 | Operational water use |  |  |  |
| RPRE R | Renewable primary resources used as an energy camier |  |  |  |  | ILRW In |  | Intermediate/low-level radioactive waste |  |  |  | C1 | De-construction/Demolition |  |  |  |
| RPRM R | Renewable primary resources with energy content used as material |  |  |  |  | A1-3 Prod |  | Production stage |  |  |  | C2 | Transport |  |  |  |
| REDwps R | Recovered energy from disposal of waste in previous systems |  |  |  |  | A4 $\begin{array}{ll}\text { A5 } & \text { Tra } \\ \end{array}$ |  | Transport to site |  |  |  | C3 | Waste processing |  |  |  |
| $\mathrm{ADP}_{\text {fossil, }}$ A | Abiotic depletion potential for fossil resources used as energy |  |  |  |  |  |  | Installation |  |  |  | C4 | Disposal |  |  |  |

ADP fossil,M Abiotic depletion potential for fossil resources used as materials
Note: "E $\pm$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 23
Product: Sikafloor ${ }^{\circledR}$ Fastfior ${ }^{\circledR}$ CR Broadcast Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{1 0}$ years

| Indicators | Units | Total | A1-3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | 87 | C1 | C2 | C3 | C4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | $\mathrm{kg} \mathrm{CO}_{2} \mathrm{eq}$. | $1.90 \mathrm{E}+1$ | 8.69E+0 | 5.97E-1 | 1.90E-1 | 0 | 1.16E+0 | 0 | 8.27E+0 | 0 | 0 | 0 | 0 | 1.24E-1 | 0 | 3.03E-3 |
| AP | $\mathrm{kg} \mathrm{SO}_{2} \mathrm{eq}$. | $9.78 \mathrm{E}-2$ | $4.38 \mathrm{E}-2$ | 4.02E-3 | 9.79E-4 | 0 | $6.40 \mathrm{E}-3$ | 0 | 4.19E-2 | 0 | 0 | 0 | 0 | 7.12E-4 | 0 | 3.72E-6 |
| EP | $\mathrm{kg} \mathrm{N} \mathrm{eq}$. | 7.63E-2 | 3.39E-2 | 8.52E-4 | 7.07E-4 | 0 | $8.53 \mathrm{E}-3$ | 0 | 3.19E-2 | 0 | 0 | 0 | 0 | 1.02E-4 | 0 | 3.09E-4 |
| SPP | $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | $1.22 \mathrm{E}+0$ | $4.85 \mathrm{E}-1$ | $1.08 \mathrm{E}-1$ | $3.68 \mathrm{E}-2$ | 0 | $5.84 \mathrm{E}-2$ | 0 | 5.09E-1 | 0 | 0 | 0 | 0 | $1.95 \mathrm{E}-2$ | 0 | 8.69E-5 |
| ODP | kg CFC-11 eq. | $2.53 \mathrm{E}-6$ | $1.15 \mathrm{E}-6$ | $1.43 \mathrm{E}-7$ | 2.67E-8 | 0 | 6.14E-8 | 0 | 1.12E-6 | 0 | 0 | 0 | 0 | 2.98E-8 | 0 | $1.72 \mathrm{E}-10$ |
| Resource use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NRPRE | MJ | $2.37 \mathrm{E}+2$ | $1.05 \mathrm{E}+2$ | 9.07E+0 | 2.34E+0 | 0 | 1.83E+1 | 0 | $1.00 \mathrm{E}+2$ | 0 | 0 | 0 | 0 | $1.78 \mathrm{E}+0$ | 0 | 4.61E-1 |
| NRPR ${ }_{\text {m }}$ | kg | 3.10E+0 | 1.59E+0 | 0 | 3.17E-2 | 0 | 0 | 0 | $1.49 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPRE | MJ | $2.06 \mathrm{E}+1$ | 7.22E+0 | $1.31 \mathrm{E}-1$ | $1.58 \mathrm{E}-1$ | 0 | 6.26E+0 | 0 | $6.77 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 8.39E-3 | 0 | $1.18 \mathrm{E}-2$ |
| RPR ${ }_{\text {M }}$ | kg | $2.85 \mathrm{E}-1$ | 1.02E-2 | 0 | $2.04 \mathrm{E}-4$ | 0 | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REDwps | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADP frosil, $^{\text {e }}$ | MJ | $2.16 \mathrm{E}+2$ | 9.47E+1 | 8.93E+0 | 2.13E+0 | 0 | $1.65 \mathrm{E}+1$ | 0 | $9.11 \mathrm{E}+1$ | 0 | 0 | 0 | 0 | 1.77E+0 | 0 | 4.55E-1 |
| ADP fossil, $^{\text {m }}$ | kg | 3.10E+0 | $1.59 \mathrm{E}+0$ | 0 | 3.17E-2 | 0 | 0 | 0 | $1.49 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SM | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | $\mathrm{m}^{3}$ | $3.73 \mathrm{E}-1$ | $1.25 \mathrm{E}-1$ | $1.86 \mathrm{E}-3$ | $2.60 \mathrm{E}-3$ | 0 | $1.28 \mathrm{E}-1$ | 0 | 1.14E-1 | 0 | 0 | 0 | 0 | $2.19 \mathrm{E}-4$ | 0 | 5.10E-4 |
| Waste* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HWD | kg | 4.30E-2 | $2.20 \mathrm{E}-2$ | 0 | 4.40E-4 | 0 | 0 | 0 | 2.06E-2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NHWD | kg | 3.16E+0 | 0 | 0 | 7.99E-2 | 0 | 0 | 0 | $6.88 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 0 | 0 | 3.01E+0 |
| HLRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IWRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legend |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP G | Global warming potential ( $\mathrm{GWP}_{100}$ )Acidification potential |  |  |  |  | SM Se |  | Secondary materials |  |  |  | B1 | Use |  |  |  |
| AP A |  |  |  |  |  | RSF R |  | Renewable secondary fuels |  |  |  | B2 | Maintenance |  |  |  |
| EP Eut | Acidification potential |  |  |  |  | NRSF N |  | Non-renewable secondary fuels |  |  |  | B3 | Repair |  |  |  |
| SFP Sm | Smog formation potential |  |  |  |  | FW C |  | Consumption of fresh water |  |  |  | B4 | Replacement |  |  |  |
| ODP O | Ozone depletion potential |  |  |  |  | HWDNHWD |  | Hazardous waste disposed |  |  |  | B5 | Refurbishment |  |  |  |
| NRPRE ${ }_{\text {E }}$ | Non-renewable primary resourcesused as an energy camier |  |  |  |  |  |  | Non-hazardous waste disposed |  |  |  | B6 | Operational energy use |  |  |  |
| NRPRM N | Non-renewable primary resources with energy content used as a material |  |  |  |  | HLRW His |  | High-level radioactive waste |  |  |  | B7 | Operational water use |  |  |  |
| RPRE R | Renewable primary resourcesused as an energy carier |  |  |  |  | ILRW In |  | Intermediate/low-level radioactive waste |  |  |  | C1 | De-construction/Demolition |  |  |  |
| RPRM R | Renewable primary resources with energy content used asa materialRecovered energy from disposal of waste in previous systems |  |  |  |  | A1-3 Pr |  | Production stage |  |  |  | C2 | Transport |  |  |  |
| REDwps R |  |  |  |  |  | $\begin{array}{ll}\text { A4 } & \text { Tra } \\ \text { A }\end{array}$ |  | Transport to site |  |  |  | C3 | Waste processing |  |  |  |
| ADP ${ }_{\text {fosil, }}$ E A | Recovered energy from disposal of waste in previous systemsAbiotic depletion potential forfossil resources used as energy |  |  |  |  |  |  | installation |  |  |  | C4 | Disposal |  |  |  |

ADPfosi,M Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \pm$ " means " $\times 10 \pm$ "'. E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 24
Product: Sikafloor ${ }^{\circledR}$ Fastfior ${ }^{\circledR}$ CR Broadcast Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technic al service life: $\mathbf{1 5}$ years


ADPfosi,M Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \pm$ " means " $\times 10 \pm$ "'. E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared.
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 25
Product: Sikafloor ${ }^{\circledR}$ Fastflor ${ }^{\circledR}$ CR Smooth Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{1 0}$ years


ADPfosi,M Abiotic depletion potential for fossil resources used as materials
Note: "E $\pm$ " " means " $\times 10 \pm$ ". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 26
Product: Sikafloor ${ }^{\circledR}$ Fastflor ${ }^{\circledR}$ CR Smooth Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technic al service life: $\mathbf{1 5}$ years

| Indicators | Units | Total | A1-3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | 87 | C1 | C2 | C3 | C4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | $\mathrm{kg} \mathrm{CO}_{2} \mathrm{eq}$. | $1.28 \mathrm{E}+1$ | 3.69E+0 | 1.05E-1 | 7.75E-2 | 0 | 1.16E+0 | 0 | 7.63E+0 | 0 | 0 | 0 | 0 | $1.19 \mathrm{E}-1$ | 0 | 5.90E-3 |
| AP | $\mathrm{kg} \mathrm{SO}_{2} \mathrm{eq}$. | $6.54 \mathrm{E}-2$ | $1.85 \mathrm{E}-2$ | 7.07E-4 | 3.93E-4 | 0 | 6.40E-3 | 0 | 3.87E-2 | 0 | 0 | 0 | 0 | 6.85E-4 | 0 | $4.72 \mathrm{E}-6$ |
| EP | $\mathrm{kg} \mathrm{N} \mathrm{eq}$. | 5.36E-2 | $1.45 \mathrm{E}-2$ | 1.49E-4 | 2.97E-4 | 0 | 8.53E-3 | 0 | $2.94 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 9.81E-5 | 0 | $6.37 \mathrm{E}-4$ |
| SPP | $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | 7.85E-1 | $2.04 \mathrm{E}-1$ | 1.90E-2 | $1.52 \mathrm{E}-2$ | 0 | 5.84E-2 | 0 | 4.70E-1 | 0 | 0 | 0 | 0 | $1.88 \mathrm{E}-2$ | 0 | $1.09 \mathrm{E}-4$ |
| ODP | kg CFC-11 eq. | $1.65 \mathrm{E}-6$ | 4.89E-7 | $2.50 \mathrm{E}-8$ | $1.06 \mathrm{E}-8$ | 0 | $6.14 \mathrm{E}-8$ | 0 | 1.03E-6 | 0 | 0 | 0 | 0 | 2.87E-8 | 0 | 2.03E-10 |
| Resource use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NRPRE | MJ | $1.60 \mathrm{E}+2$ | 4.44E+1 | 1.59E+0 | $9.48 \mathrm{E}-1$ | 0 | 1.83E+1 | 0 | $9.26 \mathrm{E}+1$ | 0 | 0 | 0 | 0 | 1.72E+0 | 0 | $4.47 \mathrm{E}-1$ |
| NRPRM | kg | 2.07E+0 | 6.82E-1 | 0 | $1.36 \mathrm{E}-2$ | 0 | 0 | 0 | $1.37 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPRE | MJ | 1.57E+1 | 3.08E+0 | 2.28E-2 | $6.65 \mathrm{E}-2$ | 0 | 6.26E+0 | 0 | $6.25 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 8.07E-3 | 0 | $1.15 \mathrm{E}-2$ |
| RPRM | kg | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REDups | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADP frosil, $^{\text {E }}$ | MJ | $1.45 \mathrm{E}+2$ | 4.02E+1 | 1.57E+0 | 8.59E-1 | 0 | $1.65 \mathrm{E}+1$ | 0 | $8.41 \mathrm{E}+1$ | 0 | 0 | 0 | 0 | 1.70E+0 | 0 | $4.40 \mathrm{E}-1$ |
| ADP ${ }_{\text {fossil, }}$ M | kg | $2.07 \mathrm{E}+0$ | $6.82 \mathrm{E}-1$ | 0 | $1.36 \mathrm{E}-2$ | 0 | 0 | 0 | 1.37E+0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SM | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | $\mathrm{m}^{3}$ | $2.88 \mathrm{E}-1$ | 5.21E-2 | 3.26E-4 | $1.08 \mathrm{E}-3$ | 0 | $1.28 \mathrm{E}-1$ | 0 | 1.06E-1 | 0 | 0 | 0 | 0 | 2.11E-4 | 0 | $4.94 \mathrm{E}-4$ |
| Waste* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HWD | kg | 2.87E-2 | $9.46 \mathrm{E}-3$ | 0 | 1.89E-4 | 0 | 0 | 0 | 1.90E-2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NHWD | kg | 2.99E+0 | 0 | 0 | 3.22E-2 | 0 | 0 | 0 | $6.35 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 0 | 0 | $2.90 \mathrm{E}+0$ |
| HLRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IWRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legend |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP G | Global wa ming potential ( $\mathrm{GWP}_{100}$ ) |  |  |  |  | SM Sec |  | Secondary materials |  |  |  | B1 Use |  |  |  |  |
| AP A | Acidific ation potential |  |  |  |  | RSF Re |  | Renewable secondary fuels |  |  |  | B2 | Maintenance |  |  |  |
| EP Eut | Eutrophication potential |  |  |  |  | NRSF No |  | Non-renewable secondary fuels |  |  |  | B3 | Repair |  |  |  |
| SFP S | Smog formation potential |  |  |  |  | FW C |  | Consumption of fresh water |  |  |  | B4 | Replacement |  |  |  |
| ODP O | Ozone depletion potential |  |  |  |  | HWD H |  | Hazardous waste disposed |  |  |  | B5 | Refurbishment |  |  |  |
| NRPRE ${ }_{\text {E }}$ | Non-renewable primary resourcesused as an energy camier |  |  |  |  | NHWD N |  | Non-hazardous waste disposed |  |  |  | B6 | Operational energy use |  |  |  |
| NRPRM | Non-renewable primary resources with energy content used asa material |  |  |  |  | HLRW Hig |  | High-level radioactive waste |  |  |  | B7 | Operational water use |  |  |  |
| RPRE R | Renewable primary resourcesused as an energy camier |  |  |  |  | ILRW In |  | Intermediate/low-level radioactive waste |  |  |  | C1 | De-construction/Demolition |  |  |  |
| RPRM R | Renewable primary resources with energy content used asa materialRecovered energy from disposal of waste in previous systems |  |  |  |  | A1-3 Prod |  | Production stage |  |  |  | C2 | Transport |  |  |  |
| REDwps R |  |  |  |  |  | A4 $\quad$ A5 $\quad$ In |  | Transport to site |  |  |  | C3 | Waste processing |  |  |  |
| ADP fossil, $^{\text {E }}$ | Abiotic depletion potential for fossil resources used as energy |  |  |  |  |  |  | Installation |  |  |  | C4 | Disposal |  |  |  |

ADP fossi,M Abiotic depletion potential for fossil resources used as materials
Note: "E $\pm$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 27
Product: Sikafloor ${ }^{\circledR}$ Fastflor ${ }^{\circledR}$ CR Smooth Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market and technic al service life: $\mathbf{5}$ years


ADPfossi,M Abiotic depletion potential for fossil resourcesused as materials
Note: " $\mathrm{E} \pm$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for informational puposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 28
Product: Sikafloor ${ }^{\circledR}$ Monitex ${ }^{\circledR}$ trowelled Application: commercial and industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market and technic al service life: $\mathbf{3 0}$ years

| Indicators | 5 Units | Total | A1-3 | A4 | A5 | B1 | B2 | 83 | B4 | B5 | B6 | 87 | C1 | C2 | C3 | C4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | $\mathrm{kg} \mathrm{CO}_{2} \mathrm{eq}$. | $1.49 \mathrm{E}+1$ | 9.46E+0 | 1.85E+0 | $2.30 \mathrm{E}-1$ | 0 | 1.16E+0 | 0 | 2.09E+0 | 0 | 0 | 0 | 0 | 8.67E-2 | 0 | 4.29E-3 |
| AP | $\mathrm{kg} \mathrm{SO}_{2} \mathrm{eq}$. | 7.61E-2 | 4.42E-2 | $1.24 \mathrm{E}-2$ | $1.15 \mathrm{E}-3$ | 0 | 6.40E-3 | 0 | $1.14 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 4.98E-4 | 0 | 3.43E-6 |
| EP | $\mathrm{kg} \mathrm{N} \mathrm{eq}$. | 5.37E-2 | 3.36E-2 | 2.65E-3 | 7.33E-4 | 0 | 8.53E-3 | 0 | 7.64E-3 | 0 | 0 | 0 | 0 | 7.12E-5 | 0 | 4.63E-4 |
| SPP | $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | $1.35 \mathrm{E}+0$ | $5.44 \mathrm{E}-1$ | 3.33E-1 | 2.04E-1 | 0 | 5.84E-2 | 0 | 1.97E-1 | 0 | 0 | 0 | 0 | 1.36E-2 | 0 | 7.90E-5 |
| ODP | kg CFC-11 eq. | $2.09 \mathrm{E}-6$ | 1.24E-6 | $4.42 \mathrm{E}-7$ | $3.44 \mathrm{E}-8$ | 0 | $6.14 \mathrm{E}-8$ | 0 | $2.94 \mathrm{E}-7$ | 0 | 0 | 0 | 0 | 2.09E-8 | 0 | $1.47 \mathrm{E}-10$ |
| Resource use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NRPRE | MJ | $1.91 \mathrm{E}+2$ | $1.15 \mathrm{E}+2$ | $2.81 \mathrm{E}+1$ | 2.92E+0 | 0 | $1.83 \mathrm{E}+1$ | 0 | $2.51 \mathrm{E}+1$ | 0 | 0 | 0 | 0 | $1.25 \mathrm{E}+0$ | 0 | 3.25E-1 |
| NRPRM | kg | 2.26E+0 | 1.84E+0 | 0 | 3.68E-2 | 0 | 0 | 0 | 3.81E-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPRE | MJ | $1.68 \mathrm{E}+1$ | 7.83E+0 | 4.06E-1 | $1.70 \mathrm{E}-1$ | 0 | $6.26 \mathrm{E}+0$ | 0 | 2.09E+0 | 0 | 0 | 0 | 0 | $5.86 \mathrm{E}-3$ | 0 | 8.37E-3 |
| RPRM | kg | 3.21E-1 | 4.47E-2 | 0 | 8.94E-4 | 0 | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REDwps | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADP frosil, $^{\text {E }}$ | MJ | $1.76 \mathrm{E}+2$ | 1.04E+2 | 2.77E+1 | $2.70 \mathrm{E}+0$ | 0 | $1.65 \mathrm{E}+1$ | 0 | 2.27E+1 | 0 | 0 | 0 | 0 | $1.24 \mathrm{E}+0$ | 0 | $3.20 \mathrm{E}-1$ |
| ADP frosil, $^{\text {M }}$ | kg | $2.26 E+0$ | 1.84E+0 | 0 | 3.68E-2 | 0 | 0 | 0 | 3.81E-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SM | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | $\mathrm{m}^{3}$ | $3.16 \mathrm{E}-1$ | $1.46 \mathrm{E}-1$ | $5.78 \mathrm{E}-3$ | $3.07 \mathrm{E}-3$ | 0 | $1.28 \mathrm{E}-1$ | 0 | $3.30 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | $1.53 \mathrm{E}-4$ | 0 | 3.59E-4 |
| Waste* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HWD | kg | 3.62E-2 | $2.79 \mathrm{E}-2$ | 0 | 5.58E-4 | 0 | 0 | 0 | 7.73E-3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NHWD | kg | 2.19E+0 | 0 | 0 | 7.58E-2 | 0 | 0 | 0 | $1.15 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 0 | 0 | $2.10 \mathrm{E}+0$ |
| HLRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IURW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legend |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | Global warming potential (GWP ${ }_{100}$ ) |  |  |  |  | SM Se |  | Secondary materials |  |  |  | B1 Use |  |  |  |  |
| AP | Acidification potential |  |  |  |  | RSF R |  | Renewable secondary fuels |  |  |  | B2 | Maintenance |  |  |  |
| EP |  |  |  |  |  | NRSF N |  | Non-renewable secondary fuels |  |  |  | B3 | Repair |  |  |  |
| SFP | Smog formation potential |  |  |  |  | FW C |  | Consumption of fresh water |  |  |  | B4 | Replacement |  |  |  |
| ODP | Ozone depletion potential |  |  |  |  | HWD H |  | Hazardous waste disposed |  |  |  | B5 | Refurbishment |  |  |  |
| NRPRE | Non-renewable primary resources used as an energy camer |  |  |  |  |  | NHWD N | Non-hazardous waste disposed |  |  |  | B6 | Operational energy use |  |  |  |
| NRPRM | Non-renewable primary resources with energy content used asa material |  |  |  |  | HLRWIШRWHigIn |  | High-level radioactive waste |  |  |  | B7 | Operational water use |  |  |  |
| RPRE | Renewable primary resources used as an energy camier |  |  |  |  |  |  | Intermediate/low-level radioactive waste |  |  |  | C1 | De-construction/Demolition |  |  |  |
| RPRM | Renewable primary resources with energy content used as a materialRecovered energy from disposal of waste in previous systems |  |  |  |  |  | ILRW A1-3 P | on sta |  |  |  | C2 | Transport |  |  |  |
| RE ${ }_{\text {dwps }}$ |  |  |  |  |  | A4 $\quad$ Tras |  | Transport to site |  |  |  | C3 | Waste processing |  |  |  |
| ADP ${ }_{\text {fossil, }}$ | Abiotic depletion potential for fossil resourcesused as energy |  |  |  |  | A5 Ins |  | Installation |  |  |  | C4 | Disposal |  |  |  |

ADP fossi,M Abiotic depletion potential for fossil resourcesused as materials
Note: "E $\pm$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 29
Product: Skafloor ${ }^{\circledR}$ Monitex ${ }^{\circledR}$ trowelled Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: 60 years


ADPfossil, M Abiotic depletion potential for fossil resources used as materials
Note: "E Y "" means " $\times 10 \pm$ "‘. E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for informational puposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 30
Product: Sikafloor ${ }^{\circledR}$ Monitex ${ }^{\circledR}$ trowelled Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{2 0}$ years


ADPfosi,M Abiotic depletion potential for fossil resources used as materials
Note: "E $\pm$ " means " $\times 10 \pm$ ". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 31
Product: Sikafloor ${ }^{\circledR}$ Monitex ${ }^{\circledR}$ smooth and broadcast Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{2 0}$ years


ADP ${ }_{\text {fosil, M }}$ Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \Psi$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurently exist within the LCI data used to generate waste metricsforlife cycle assessmentsand environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems| Environmental Product Declaration (EPD) \#2068-2738

Table 32

Product: Sikafloor ${ }^{\circledR}$ Monitex ${ }^{\circledR}$ smooth and broadcast Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: $\mathbf{3 0}$ years


Sika Canada | Sika Resinous \& Cementitious Flooring Systems|Environmental Product Declaration (EPD) \#2068-2738

Table 33
Product: Sikafloor ${ }^{\circledR}$ Monitex ${ }^{\circledR}$ smooth and broadcast Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{1 0}$ years


ADP ${ }_{\text {fossil,M }}$ Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \Psi$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurently exist within the LCI data used to generate waste metricsfor life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems|Environmental Product Declaration (EPD) \#2068-2738

Table 34

Product: Sikafloor ${ }^{\circledR}$ Monitex ${ }^{\circledR}$ smooth and broadcast Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: $\mathbf{1 5}$ years


ADP ${ }_{\text {fossil,M }}$ Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \Psi$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurently exist within the LCI data used to generate waste metricsfor life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

## Table 35

## Product: Sikafloor® ${ }^{\circledR}$ NA PurCem ${ }^{\circledR}$

 Application: industrialFunctional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{2 0}$ years


ADPfosi,M Abiotic depletion potential for fossil resources used as materials
Note: " $E \pm$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

## Table 36

## Product: Sikafloor® ${ }^{\circledR}$ NA PurCem ${ }^{\circledR}$

 Application: industrialFunctional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: $\mathbf{3 0}$ years


ADP fossi,M Abiotic depletion potential for fossil resources used as materials
Note: "E $\pm$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared.
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 37
Product: Sikafloor ${ }^{\circledR}$ Quartzite ${ }^{\circledR}$ System HDB and trowelled Application: commercial and industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market and technic al service life: $\mathbf{3 0}$ years


ADP fossi,M Abiotic depletion potential for fossil resources used as materials
Note: " $E \pm$ " means " $\times 10 \pm$ "c. E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module $D$ is not declared
*Significant data limitationscurently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for infomational puposesonly. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 38
Product: Sikafloor ${ }^{\circledR}$ Quartzite ${ }^{\circledR}$ System HDB and trowelled Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: 60 years

| Indicators | Units | Total | A1-3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | 87 | C1 | C2 | C3 | C4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | $\mathrm{kg} \mathrm{CO}_{2} \mathrm{eq}$. | $1.42 \mathrm{E}+1$ | $1.09 \mathrm{E}+1$ | 1.84E+0 | 2.58E-1 | 0 | 1.16E+0 | 0 | 0 | 0 | 0 | 0 | 0 | 6.36E-2 | 0 | 3.14E-3 |
| AP | $\mathrm{kg} \mathrm{SO}_{2} \mathrm{eq}$. | $6.84 \mathrm{E}-2$ | 4.81E-2 | $1.23 \mathrm{E}-2$ | $1.23 \mathrm{E}-3$ | 0 | $6.40 \mathrm{E}-3$ | 0 | 0 | 0 | 0 | 0 | 0 | $3.65 \mathrm{E}-4$ | 0 | $2.51 \mathrm{E}-6$ |
| EP | $\mathrm{kg} \mathrm{N} \mathrm{eq}$. | $5.11 \mathrm{E}-2$ | 3.87E-2 | $2.63 \mathrm{E}-3$ | 8.35E-4 | 0 | 8.53E-3 | 0 | 0 | 0 | 0 | 0 | 0 | 5.22E-5 | 0 | 3.39E-4 |
| SPP | $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | $1.22 \mathrm{E}+0$ | 6.14E-1 | $3.30 \mathrm{E}-1$ | $2.07 \mathrm{E}-1$ | 0 | 5.84E-2 | 0 | 0 | 0 | 0 | 0 | 0 | 9.99E-3 | 0 | 5.79E-5 |
| ODP | kg CFC-11 eq. | $1.98 \mathrm{E}-6$ | 1.43E-6 | $4.38 \mathrm{E}-7$ | 3.82E-8 | 0 | $6.14 \mathrm{E}-8$ | 0 | 0 | 0 | 0 | 0 | 0 | $1.53 \mathrm{E}-8$ | 0 | $1.08 \mathrm{E}-10$ |
| Resource use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NRPRE | MJ | 1.84E+2 | 1.33E+2 | $2.79 \mathrm{E}+1$ | 3.29E+0 | 0 | 1.83E+1 | 0 | 0 | 0 | 0 | 0 | 0 | $9.13 \mathrm{E}-1$ | 0 | $2.38 \mathrm{E}-1$ |
| NRPRM | kg | $2.19 \mathrm{E}+0$ | 2.14E+0 | 0 | $4.29 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPRE | MJ | $1.54 \mathrm{E}+1$ | 8.50E+0 | $4.03 \mathrm{E}-1$ | $1.84 \mathrm{E}-1$ | 0 | 6.26E+0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.30E-3 | 0 | 6.13E-3 |
| RPR ${ }_{\text {M }}$ | kg | $3.20 \mathrm{E}-1$ | 4.37E-2 | 0 | 8.74E-4 | 0 | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REDwPs | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADP frosil, $^{\text {e }}$ | MJ | $1.69 \mathrm{E}+2$ | 1.21E+2 | $2.75 \mathrm{E}+1$ | 3.03E+0 | 0 | $1.65 \mathrm{E}+1$ | 0 | 0 | 0 | 0 | 0 | 0 | 9.07E-1 | 0 | $2.35 \mathrm{E}-1$ |
| ADP fossil, $^{\text {m }}$ | kg | $2.19 \mathrm{E}+0$ | $2.14 \mathrm{E}+0$ | 0 | $4.29 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SM | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | $\mathrm{m}^{3}$ | $2.98 \mathrm{E}-1$ | $1.60 \mathrm{E}-1$ | $5.73 \mathrm{E}-3$ | $3.36 \mathrm{E}-3$ | 0 | $1.28 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 1.12E-4 | 0 | 2.63E-4 |
| Waste* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HWD | kg | 3.04E-2 | $2.98 \mathrm{E}-2$ | 0 | 5.95E-4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NHWD | kg | $1.63 \mathrm{E}+0$ | 0 | 0 | 8.33E-2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $1.54 \mathrm{E}+0$ |
| HLRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IWRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legend |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP G | Global warming potential ( GWP ${ }_{100}$ ) |  |  |  |  | SM Se |  | Secondary materials |  |  |  | B1 | Use |  |  |  |
| AP Acid |  |  |  |  |  | RSF Re |  | Renewable secondary fuels |  |  |  | B2 | Maintenance |  |  |  |
| EP Euta | Acidification potentialEutrophication potential |  |  |  |  | NRSF N |  | Non-renewable secondary fuels |  |  |  | B3 | Repair |  |  |  |
| SFP S | Smog formation potential |  |  |  |  | FW C |  | Consumption of fresh water |  |  |  | B4 | Replacement |  |  |  |
| ODP O | Ozone depletion potential |  |  |  |  | HWD Ha |  | Hazardous waste disposed |  |  |  | B5 | Refurbishment |  |  |  |
| NRPRE | Non-renewable primary resourcesused as an energy camer |  |  |  |  | NHWD N |  | Non-hazardous waste disposed |  |  |  | B6 | Operational energy use |  |  |  |
| NRPRM N | Non-renewable primary resources with energy content used as a material |  |  |  |  | HLRW H |  | High-level radioactive waste |  |  |  | B7 | Operational water use |  |  |  |
| $\mathrm{RPR}_{\mathrm{E}} \quad \mathrm{R}$ | Renewable primary resourcesused as an energy camer |  |  |  |  | ILRW In |  | Intermediate/low-level radioactive waste |  |  |  | C1 | De-construction/Demolition |  |  |  |
| RPRM $\quad$ R | Renewable primary resources with energy content used asa materialRecovered energy from disposal of waste in previous systems |  |  |  |  | A1-3 Prod |  | Production stage |  |  |  | C2 | Transport |  |  |  |
| REDwps |  |  |  |  |  | A4 ${ }_{\text {A5 }} \quad$ In |  | Transport to site |  |  |  | C3 | Waste processing |  |  |  |
| $\mathrm{ADP}_{\text {fossil, }} \mathrm{E}$ | Recovered energy from disposal of waste in previous systemsAbiotic depletion potential for fossil resources used as energy |  |  |  |  |  |  | installation |  |  |  | C4 | Disposal |  |  |  |

ADPfosi,M Abiotic depletion potential for fossil resourcesused as materials
Note: "E Y " means " $\times 10 \pm$ "'. E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 39
Product: Skafloor ${ }^{\circledR}$ Quartzite ${ }^{\circledR}$ System HDB and trowelled Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{2 0}$ years


ADP fossil, E Abiotic depletion potential for fossil resourcesused as energy
ADPfossil, M Abiotic depletion potential for fossil resources used as materials
Note: "E Y " means " $\times 10 \pm$ "'. E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module $D$ is not declared
*Significant data limitationscurently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems|Environmental Product Declaration (EPD) \#2068-2738

Table 40
Product: Sikafloor ${ }^{\circledR}$ Quartzite ${ }^{\circledR}$ System Broadcast Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{2 0}$ years

| Indicators | Units | Total | A1-3 | A4 | A5 | 81 |  | 82 | 83 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | kg CO 2 eq . | $1.61 \mathrm{E}+1$ | 8.83E+0 | 1.27E+0 | $2.05 \mathrm{E}-1$ | 0 |  | 1.16E+0 | 0 | 4.44E+0 | 0 | 0 | 0 | 0 | 9.90E-2 | 5.63E-2 | $2.45 \mathrm{E}-3$ |
| AP | $\mathrm{kg} \mathrm{SO}_{2} \mathrm{eq}$. | 7.47E-2 | 3.89E-2 | 8.50E-3 | 9.66E-4 | 0 |  | $6.40 \mathrm{E}-3$ | 0 | $1.94 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 5.68E-4 | $4.70 \mathrm{E}-6$ | $1.96 \mathrm{E}-6$ |
| EP | $\mathrm{kg} \mathrm{Neq}$. | $6.01 \mathrm{E}-2$ | 3.25E-2 | 1.81E-3 | 6.93E-4 | 0 |  | 8.53E-3 | 0 | $1.62 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 8.13E-5 | $1.04 \mathrm{E}-5$ | $2.64 \mathrm{E}-4$ |
| SPP | $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | $1.23 \mathrm{E}+0$ | 4.91E-1 | $2.28 \mathrm{E}-1$ | 7.35E-2 | 0 |  | $5.84 \mathrm{E}-2$ | 0 | 3.66E-1 | 0 | 0 | 0 | 0 | 1.56E-2 | $1.41 \mathrm{E}-4$ | 4.51E-5 |
| ODP | kg CFC-11 eq. | 2.27E-6 | $1.24 \mathrm{E}-6$ | 3.02E-7 | 3.15E-8 | 0 |  | $6.14 \mathrm{E}-8$ | 0 | 6.19E-7 | 0 | 0 | 0 | 0 | $2.38 \mathrm{E}-8$ | 4.94E-11 | 8.39E-11 |
| Resource use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NRPRE | MJ | $2.05 \mathrm{E}+2$ | $1.08 \mathrm{E}+2$ | 1.92E+1 | $2.59 \mathrm{E}+0$ | 0 |  | $1.83 \mathrm{E}+1$ | 0 | 5.54E+1 | 0 | 0 | 0 | 0 | $1.42 \mathrm{E}+0$ | 4.42E-3 | $3.65 \mathrm{E}-1$ |
| NRPRM | kg | $2.57 \mathrm{E}+0$ | 1.68E+0 | 0 | 3.37E-2 | 0 |  | 0 | 0 | 8.54E-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPRE | MJ | 1.73E+1 | 7.15E+0 | $2.77 \mathrm{E}-1$ | $1.54 \mathrm{E}-1$ | 0 |  | 6.26E+0 | 0 | 3.50E+0 | 0 | 0 | 0 | 0 | $6.69 \mathrm{E}-3$ | $1.37 \mathrm{E}-4$ | $9.37 \mathrm{E}-3$ |
| RPRM | kg | $3.05 \mathrm{E}-1$ | 2.92E-2 | 0 | 5.84E-4 | 0 |  | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REDwPs | MJ | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADP frosil, $^{\text {E }}$ | MJ | 1.87E+2 | $9.75 \mathrm{E}+1$ | $1.89 \mathrm{E}+1$ | $2.38 \mathrm{E}+0$ | 0 |  | $1.65 \mathrm{E}+1$ | 0 | 5.04E+1 | 0 | 0 | 0 | 0 | $1.41 \mathrm{E}+0$ | 4.31E-3 | $3.59 \mathrm{E}-1$ |
| ADP ${ }_{\text {fosil, }}$ M | kg | $2.57 \mathrm{E}+0$ | $1.68 \mathrm{E}+0$ | 0 | 3.37E-2 | 0 |  | 0 | 0 | 8.54E-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SM | kg | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | $\mathrm{m}^{3}$ | $3.25 \mathrm{E}-1$ | $1.30 \mathrm{E}-1$ | 3.95E-3 | $2.70 \mathrm{E}-3$ | 0 |  | $1.28 \mathrm{E}-1$ | 0 | 6.02E-2 | 0 | 0 | 0 | 0 | $1.75 \mathrm{E}-4$ | 4.24E-6 | 4.03E-4 |
| Waste* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HWD | kg | 3.56E-2 | 2.33E-2 | 0 | 4.67E-4 | 0 |  | 0 | 0 | 1.18E-2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NHWD | kg | 2.47E+0 | 0 | 0 | 6.50E-2 | 0 |  | 0 | 0 | $2.39 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 0 | 0 | $2.38 \mathrm{E}+0$ |
| HLRW | kg | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IWRW | kg | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legend |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP G | Global warming potential ( GWP ${ }_{100}$ ) |  |  |  |  | SM Se |  |  | Secondary materials |  |  |  | B1 | Use |  |  |  |
| AP A |  |  |  |  |  | RSF Re |  |  | Renewable secondary fuels |  |  |  | B2 | Maintenance |  |  |  |
| EP E | Acidification potentialEutrophication potential |  |  |  |  | NRSF N |  |  | Non-renewable secondary fuels |  |  |  | B3 | Repair |  |  |  |
| SFP S | Smog formation potential |  |  |  |  | FW Con |  |  | Consumption of fresh water |  |  |  | B4 | Replacement |  |  |  |
| ODP O | Ozone depletion potential |  |  |  |  | HWD H |  |  | Hazardous waste disposed |  |  |  | B5 | Refurbishment |  |  |  |
| NRPRE $\quad$ N | Non-renewable primary resourcesused as an energy camer |  |  |  |  | NHWD N |  |  | Non-hazardous waste disposed |  |  |  | B6 | Operational energy use |  |  |  |
| NRPRM | Non-renewable primary resources with energy content used as a material |  |  |  |  | HLRW His |  |  | High-level radioactive waste |  |  |  | B7 | Operational water use |  |  |  |
| $\mathrm{RPR}_{\mathrm{E}} \quad \mathrm{R}$ | Renewable primary resources used as an energy camier |  |  |  |  | ILRW In |  |  | Intermediate/low-level radioactive waste |  |  |  | C1 | De-construction/Demolition |  |  |  |
| RPRM R | Renewable primary resources with energy content used asa materialRecovered energy from disposal of waste in previous systems |  |  |  |  | A1-3 Prod |  |  | Production stage |  |  |  | C2 | Transport |  |  |  |
| REDwps R |  |  |  |  |  | A4 Transport to site |  |  |  |  |  |  | C3 | Waste p | essing |  |  |
| $\mathrm{ADP}_{\text {fossil, }} \mathrm{E} \quad$ A | Abiotic depletion potential for fossil resourcesused asenergy |  |  |  |  | A5 Installation |  |  |  |  |  |  | C4 | Disposal |  |  |  |

ADPfossi,M Abiotic depletion potential for fossil resources used as materials
Note: " $E \pm$ " means " $\times 10^{ \pm}$" $"$ E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared.
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems | Environmental Product Declaration (EPD) \#2068-2738

## Table 41

Product: Sikafloor ${ }^{\circledR}$ Quartzite ${ }^{\circledR}$ System Broadcast Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: $\mathbf{3 0}$ years


Sika Canada | Sika Resinous \& Cementitious Flooring Systems | Environmental Product Declaration (EPD) \#2068-2738

Table 42
Product: Sikafloor ${ }^{\circledR}$ Quartzite ${ }^{\circledR}$ System Broadcast Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{1 0}$ years


ADPfossi,M Abiotic depletion potential for fossil resources used as materials
Note: "E $\mathbf{Y}$ " means " $\times 10 \pm$ "'. E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems | Environmental Product Declaration (EPD) \#2068-2738

Table 43

Product: Sikafloor ${ }^{\circledR}$ Quartzite ${ }^{\circledR}$ System Broadcast
Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: $\mathbf{1 5}$ years


ADPfossi,M Abiotic depletion potential for fossil resources used as materials
Note: "E $\pm$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurently exist within the LCI data used to generate waste metricsfor life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 44
Product: Skafloor ${ }^{\circledR}$ Resoc lad MRWType II Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{2 0}$ years


ADPfossi,M Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \Psi$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurently exist within the LCI data used to generate waste metricsfor life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

## Table 45

Product: Sikafloor ${ }^{\circledR}$ Resoc lad MRWType II Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technic al servic e life: $\mathbf{3 0}$ years


Sika Canada | Sika Resinous \& Cementitious Flooring Systems|Environmental Product Declaration (EPD) \#2068-2738

## Table 46

Product: Skafloor ${ }^{\otimes}$ Resoc lad MRWType II Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{1 0}$ years


ADPfossi,M Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \Psi$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurently exist within the LCI data used to generate waste metricsfor life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Table 47
Product: Skafloor ${ }^{\otimes}$ Resoc lad MRWType II Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technic al service life: $\mathbf{1 5}$ years


Sika Canada | Sika Resinous \& Cementitious Flooring Systems|Environmental Product Declaration (EPD) \#2068-2738

## Table 48

Product: Skafloor ${ }^{\circledR}$ Smooth Epoxy Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{1 0}$ years


ADPfosilm Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \pm \mathrm{Y}^{\prime \prime}$ means " $\times 10 \pm$ ". E. E . " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Signific ant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for infomational puposesonly. As such, no decisions regarding actual cradle-to-grave waste performance between products requirements of 150 21930:2017, but these values
should be derived from these reported values.

## Table 49

Product: Sikafloor ${ }^{\circledR}$ Smooth Epoxy Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technic al service life: $\mathbf{1 5}$ years

| Indicators | Units | Total | A1-3 | A4 | A5 | B1 | 82 | 83 | B4 | 85 | B6 | 87 | C1. | C2 | C3 | C4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | $\mathrm{kg} \mathrm{CO}_{2} \mathrm{eq}$. | 1.13E+1 | 3.74E+0 | 1.54E-1 | 7.92E-2 | 0 | 1.16E+0 | 0 | 5.97E+0 | 0 | 0 | 0 | 0 | 1.28E-1 | 7.30E-2 | 3.17E-3 |
| AP | $\mathrm{kg} \mathrm{SO}_{2} \mathrm{eq}$. | $6.03 \mathrm{E}-2$ | 1.92E-2 | $1.04 \mathrm{E}-3$ | 4.13E-4 | 0 | $6.40 \mathrm{E}-3$ | 0 | 3.24E-2 | 0 | 0 | 0 | 0 | 7.37E-4 | 6.10E-6 | 2.54E-6 |
| EP | $\mathrm{kg} \mathrm{N} \mathrm{eq}$. | $4.55 \mathrm{E}-2$ | 1.41E-2 | 2.19E-4 | 2.91E-4 | 0 | 8.53E-3 | 0 | 2.18E-2 | 0 | 0 | 0 | 0 | 1.05E-4 | $1.35 \mathrm{E}-5$ | 3.42E-4 |
| SPP | $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | $1.02 \mathrm{E}+0$ | $2.14 \mathrm{E}-1$ | $2.78 \mathrm{E}-2$ | $1.35 \mathrm{E}-1$ | 0 | $5.84 \mathrm{E}-2$ | 0 | 5.62E-1 | 0 | 0 | 0 | 0 | 2.02E-2 | $1.83 \mathrm{E}-4$ | 5.85E-5 |
| ODP | kg CFC-11 eq. | $1.49 \mathrm{E}-6$ | 5.06E-7 | 3.67E-8 | 1.11E-8 | 0 | $6.14 \mathrm{E}-8$ | 0 | 8.40E-7 | 0 | 0 | 0 | 0 | 3.09E-8 | $6.40 \mathrm{E}-11$ | $1.09 \mathrm{E}-10$ |
| Resource use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NRPRE | MJ | $1.40 \mathrm{E}+2$ | 4.49E+1 | 2.34E+0 | 9.66E-1 | 0 | $1.83 \mathrm{E}+1$ | 0 | 7.15E+1 | 0 | 0 | 0 | 0 | $1.84 \mathrm{E}+0$ | $5.73 \mathrm{E}-3$ | 4.73E-1 |
| NRPR ${ }_{\text {M }}$ | kg | $1.80 \mathrm{E}+0$ | $6.95 \mathrm{E}-1$ | 0 | $1.39 \mathrm{E}-2$ | 0 | 0 | 0 | 1.09E+0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPRE | MJ | $1.61 \mathrm{E}+1$ | 3.79E+0 | 3.36E-2 | 7.89E-2 | 0 | $6.26 \mathrm{E}+0$ | 0 | 5.96E+0 | 0 | 0 | 0 | 0 | 8.68E-3 | $1.77 \mathrm{E}-4$ | $1.21 \mathrm{E}-2$ |
| RPRM | kg | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REDwps | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADP ${ }_{\text {fossil, }}$ E | MJ | $1.27 \mathrm{E}+2$ | 4.06E+1 | $2.30 \mathrm{E}+0$ | 8.76E-1 | 0 | $1.65 \mathrm{E}+1$ | 0 | $6.47 \mathrm{E}+1$ | 0 | 0 | 0 | 0 | 1.83E+0 | $5.59 \mathrm{E}-3$ | $4.66 \mathrm{E}-1$ |
| ADP ${ }_{\text {fossil, }}$ M | kg | $1.80 \mathrm{E}+0$ | 6.95E-1 | 0 | $1.39 \mathrm{E}-2$ | 0 | 0 | 0 | $1.09 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SM | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | $\mathrm{m}^{3}$ | $2.84 \mathrm{E}-1$ | 5.91E-2 | 4.79E-4 | 1.20E-3 | 0 | $1.28 \mathrm{E}-1$ | 0 | $9.44 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | 2.27E-4 | 5.50E-6 | 5.23E-4 |
| Waste* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HWD | kg | 3.67E-2 | 1.44E-2 | 0 | 2.87E-4 | 0 | 0 | 0 | 2.21E-2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NHWD | kg | 3.14E+0 | 0 | 0 | 2.72E-2 | 0 | 0 | 0 | 3.29E-2 | 0 | 0 | 0 | 0 | 0 | 0 | $3.08 \mathrm{E}+0$ |
| HLRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IWRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legend |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP G | Global waming potential ( GWP $_{100}$ )Acidification potential |  |  |  |  | SM Secon |  | Secondary materials |  |  |  | B1 | Use |  |  |  |
| AP A |  |  |  |  |  | RSF Re |  | Renewable secondary fuels |  |  |  | B2 | Mainten |  |  |  |
| EP Eut |  |  |  |  |  | NRSF No |  | Non-renewable secondary fuels |  |  |  | B3 | Repair |  |  |  |
| SFP S |  |  |  |  |  | FW Con |  | Consumption of fresh water |  |  |  | B4 | Replace |  |  |  |
| ODP O | Smog formation potential <br> Ozone depletion potential |  |  |  |  | HWD Ha |  | Hazardous waste disposed |  |  |  | B5 | Refurbis | ent |  |  |
| NRPRE | Ozone depletion potential <br> Non-renewable primary resources used as an energy camier |  |  |  |  |  |  | Non-hazardous waste disposed |  |  |  | B6 | Operati | a energy use |  |  |
| NRPRM | Non-renewable primary resources used as an energy camer <br> Non-renewable primary resources with energy content used as a material |  |  |  |  |  |  | High-level radioactive waste |  |  |  | B7 | Operati | I water use |  |  |
| RPR $\mathrm{R}_{\mathrm{E}}$ R | Renewable primary resourcesused as an energy camier |  |  |  |  |  |  | Intermediate/low-level radioactive waste |  |  |  | C1 | De-con | ction/Demo |  |  |
| RPRM R | Renewable primary resources with energy content used asa material |  |  |  |  |  |  | Production stage |  |  |  | C2 | Transpo |  |  |  |
| REowps R | Recovered energy from disposal of waste in previous systems |  |  |  |  |  |  | Transport to site |  |  |  | C3 | Waste p | essing |  |  |
| ADP fossil, $^{\text {E }}$ A | Abiotic depletion potential for fossil resources used asenergy |  |  |  |  |  | A | Installation |  |  |  | C4 | Disposal |  |  |  |
| ADPfossi,M A | Abiotic depletion potential for fossil resources used as materials |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Significant data limitations currently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for informational purposesonly. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Sika Canada | Sika Resinous \& Cementitious Flooring Systems| Environmental Product Declaration (EPD) \#2068-2738

Table 50

Product: Skafloor ${ }^{\circledR}$ Smooth Epoxy Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market and technic al service life: $\mathbf{5}$ years


ADPfossil, Abiotic depletion potential for fossil resources used as materials
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for informational puposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems| Environmental Product Declaration (EPD) \#2068-2738

Table 51
Product: Skafloor ${ }^{\circledR}$ Terrazzo Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{3 0}$ years


ADPfossil, Abiotic depletion potential for fossil resources used as materials
*Signific ant data limitationscurrently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for informational puposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems| Environmental Product Declaration (EPD) \#2068-2738

Table 52

Product: Skafloor® ${ }^{\text {® }}$ Tenazzo Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor coating system (cradle-to-grave)
Estimated technic al service life: $\mathbf{6 0}$ years

| Indicators | 5 Units | Total | A1-3 | A4 | A5 | B1 | B2 | 83 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | $\mathrm{kg} \mathrm{CO}_{2} \mathrm{eq}$. | 2.85E+1 | 2.58E+1 | 9.09E-1 | 5.49E-1 | 0 | 1.16E+0 | 0 | 0 | 0 | 0 | 0 | 0 | 6.36E-2 | 3.62E-2 | $1.57 \mathrm{E}-3$ |
| AP | $\mathrm{kg} \mathrm{SO}_{2} \mathrm{eq}$. | $1.51 \mathrm{E}-1$ | 1.35E-1 | 6.14E-3 | 2.90E-3 | 0 | $6.40 \mathrm{E}-3$ | 0 | 0 | 0 | 0 | 0 | 0 | 3.65E-4 | 3.02E-6 | $1.26 \mathrm{E}-6$ |
| EP | $\mathrm{kg} \mathrm{N} \mathrm{eq}$. | $1.17 \mathrm{E}-1$ | 1.05E-1 | $1.29 \mathrm{E}-3$ | 2.21E-3 | 0 | $8.53 \mathrm{E}-3$ | 0 | 0 | 0 | 0 | 0 | 0 | 5.22E-5 | 6.67E-6 | $1.70 \mathrm{E}-4$ |
| SPP | $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | $2.58 \mathrm{E}+0$ | $1.48 \mathrm{E}+0$ | 1.65E-1 | 8.66E-1 | 0 | 5.84E-2 | 0 | 0 | 0 | 0 | 0 | 0 | $9.99 \mathrm{E}-3$ | 9.06E-5 | $2.90 \mathrm{E}-5$ |
| ODP | kg CFC-11 eq. | 3.63E-6 | 3.26E-6 | $2.17 \mathrm{E}-7$ | 7.24E-8 | 0 | $6.14 \mathrm{E}-8$ | 0 | 0 | 0 | 0 | 0 | 0 | $1.53 \mathrm{E}-8$ | 3.17E-11 | 5.39E-11 |
| Resource use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NRPRE | MJ | 3.36E+2 | $2.96 \mathrm{E}+2$ | $1.38 \mathrm{E}+1$ | $6.41 \mathrm{E}+0$ | 0 | $1.83 \mathrm{E}+1$ | 0 | 0 | 0 | 0 | 0 | 0 | 9.13E-1 | $2.84 \mathrm{E}-3$ | $2.34 \mathrm{E}-1$ |
| NRPRM | kg | 4.37E+0 | 4.28E+0 | 0 | 8.56E-2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPRE | MJ | 2.98E+1 | $2.28 \mathrm{E}+1$ | 1.98E-1 | $4.85 \mathrm{E}-1$ | 0 | $6.26 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 0 | 0 | 4.30E-3 | 8.79E-5 | $6.02 \mathrm{E}-3$ |
| RPRM | kg | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | $2.75 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REDups | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADP frosil, $^{\text {E }}$ | MJ | $3.05 \mathrm{E}+2$ | $2.67 \mathrm{E}+2$ | $1.36 \mathrm{E}+1$ | 5.81E+0 | 0 | $1.65 \mathrm{E}+1$ | 0 | 0 | 0 | 0 | 0 | 0 | $9.07 \mathrm{E}-1$ | $2.77 \mathrm{E}-3$ | 2.31E-1 |
| ADP ${ }_{\text {fossil, }}$ M | kg | 4.37E+0 | 4.28E+0 | 0 | 8.56E-2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SM | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | $\mathrm{m}^{3}$ | $4.88 \mathrm{E}-1$ | 3.50E-1 | $2.83 \mathrm{E}-3$ | 7.18E-3 | 0 | $1.28 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 1.12E-4 | 2.73E-6 | $2.59 \mathrm{E}-4$ |
| Waste* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HWD | kg | 8.39E-2 | 8.23E-2 | 0 | $1.65 \mathrm{E}-3$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NHWD | kg | 1.80E+0 | 0 | 0 | 2.72E-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $1.53 \mathrm{E}+0$ |
| HLRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IШRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legend |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | Global warming potential (GWP $\mathrm{TOO}^{\text {) }}$ |  |  |  |  | SM Se |  | Secondary materials |  |  |  | B1 | Use |  |  |  |
| AP | Acidification potential |  |  |  |  |  | RSF Re | Renewable secondary fuels |  |  |  | B2 | Maintenance |  |  |  |
| EP |  |  |  |  |  |  | NRSF No | Non-renewable secondary fuels |  |  |  | B3 | Repair |  |  |  |
| SFP | Smog formation potential |  |  |  |  |  | FW Con | Consumption of fresh water |  |  |  | B4 | Replacement |  |  |  |
| ODP | Ozone depletion potential |  |  |  |  |  | HWD Ha | Hazardous waste disposed |  |  |  | B5 | Refurbishment |  |  |  |
| NRPRE | Non-renewable primary resources used as an energy camier |  |  |  |  |  | NHWD No | Non-hazardous waste disposed |  |  |  | B6 | Operational energy use |  |  |  |
| NRPRM | Non-renewable primary resources with energy content used as a material |  |  |  |  |  | HLRW His | High-level radioactive waste |  |  |  | B7 | Operational water use |  |  |  |
| RPRE | Renewable primary resources used as an energy camier |  |  |  |  |  | ILRW In | Intermediate/low-level radioactive waste |  |  |  | C1 | De-construction/Demolition |  |  |  |
| RPRM | Renewable primary resources with energy content used as a material |  |  |  |  |  | A1-3 Prod | Production stage |  |  |  | C2 | Transport |  |  |  |
| RE ${ }_{\text {dwps }}$ | Recovered energy from disposal of waste in previous systems |  |  |  |  |  | A4 $\begin{aligned} & \text { A5 }\end{aligned}$ | Transport to site |  |  |  | C3 | Waste processing |  |  |  |
| ADP fossil, $^{\text {E }}$ | Abiotic depletion potential for fossil resourcesused as energy |  |  |  |  |  |  | Installation |  |  |  | C4 | Disposal |  |  |  |
| Note: " $\mathrm{E} \pm$ " means " $\times 10 \pm \neq$ ". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared. <br>  <br>  should be derived from these reported values. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Table 53

Product: Sikafloor®-52 PC Grey Application: commercial and industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market and technic al service life: $\mathbf{3 0}$ years


Table 54
Product: Sikafloor®-52 PC Grey Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: 60 years


ADP fossim Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \pm \mathrm{Y}^{\prime \prime}$ means " $\times 10 \pm$ ". E. E . " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurrently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for infomational puposesonly. As such, no decisions regarding actual cradle-to-grave waste performance between products requirements of
should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems| Environmental Product Declaration (EPD) \#2068-2738

Table 55
Product: Sikafloor®-52 PC Grey Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{2 0}$ years


ADP ${ }_{\text {fossil,M }}$ Abiotic depletion potential for fossil resources used as materials
Note: " $\mathrm{E} \Psi$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurently exist within the LCI data used to generate waste metricsforlife cycle assessmentsand environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

## Table 56

Product: Skafloore-53 PC White Application: commercial and industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market and technic al service life: $\mathbf{3 0}$ years


Table 57

## Product: Sikafloor®-53 PC White

 Application: commercialFunctional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: 60 years


ADPfossil, M Abiotic depletion potential for fossil resources used as materials
Note: "E $E$ Y" means " $\times 10 \pm$ "‘. E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for informational puposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems| Environmental Product Declaration (EPD) \#2068-2738

Table 58
Product: Skafloor®-53 PC White Application: industrial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{2 0}$ years


ADP fossi,M Abiotic depletion potential for fossil resources used as materials
Note: "E $\pm$ " means " $\times 10 \pm$ "". E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems | Environmental Product Declaration (EPD) \#2068-2738

Table 59
Product: Sikalastic ${ }^{\text {®-3 }} \mathbf{3 9 0 0}$ Traffic Coating System Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated market service life: $\mathbf{1 0}$ years


ADP fossi,E Abiotic depletion potential for fossil resourcesused as energy
ADPfossilm Abiotic depletion potential for fossil resources used as materials
Note: "E Y " means " $\times 10 \pm$ "'. E.g. " $2.8 \mathrm{E}-1$ " means 0.28 . Module D is not declared
*Significant data limitationscurrently exist within the LCI data used to generate waste metricsforlife cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are forinformational purposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

Sika Canada | Sika Resinous \& Cementitious Flooring Systems | Environmental Product Declaration (EPD) \#2068-2738

Table 60

## Product: Sikalastic ${ }^{\circledR}$ - 3900 Traffic Coating System Application: commercial

Functional unit: $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of floor c oating system (cradle-to-grave)
Estimated technical service life: $\mathbf{1 5}$ years

| Indicators | Units | Total | A1-3 | A4 | A5 | $B 1$ | 82 | 83 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP | kg CO 2 eq . | $2.31 \mathrm{E}+1$ | 7.75E+0 | 3.19E-1 | 1.98E-1 | 0 | $1.16 \mathrm{E}+0$ | 0 | 1.33E+1 | 0 | 0 | 0 | 0 | 1.87E-1 | $1.06 \mathrm{E}-1$ | 4.61E-3 |
| AP | $\mathrm{kg} \mathrm{SO}_{2} \mathrm{eq}$. | $1.12 \mathrm{E}-1$ | 3.59E-2 | $2.16 \mathrm{E}-3$ | 7.96E-4 | 0 | $6.40 \mathrm{E}-3$ | 0 | $6.57 \mathrm{E}-2$ | 0 | 0 | 0 | 0 | $1.07 \mathrm{E}-3$ | 8.87E-6 | $3.68 \mathrm{E}-6$ |
| EP | $\mathrm{kg} \mathrm{Neq}$. | 6.75E-2 | 1.91E-2 | 4.54E-4 | $1.48 \mathrm{E}-3$ | 0 | 8.53E-3 | 0 | 3.73E-2 | 0 | 0 | 0 | 0 | $1.53 \mathrm{E}-4$ | $1.96 \mathrm{E}-5$ | 4.98E-4 |
| SPP | $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | $1.68 \mathrm{E}+0$ | $4.39 \mathrm{E}-1$ | 5.82E-2 | $1.09 \mathrm{E}-1$ | 0 | 5.84E-2 | 0 | $9.90 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 2.93E-2 | $2.66 \mathrm{E}-4$ | 8.50E-5 |
| ODP | kg CFC-11 eq. | $2.01 \mathrm{E}-6$ | 6.10E-7 | $7.64 \mathrm{E}-8$ | $1.50 \mathrm{E}-8$ | 0 | $6.14 \mathrm{E}-8$ | 0 | 1.20E-6 | 0 | 0 | 0 | 0 | $4.49 \mathrm{E}-8$ | 9.31E-11 | $1.58 \mathrm{E}-10$ |
| Resource use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NRPRE | MJ | $3.00 \mathrm{E}+2$ | 9.79E+1 | 4.86E+0 | $2.16 \mathrm{E}+0$ | 0 | $1.83 \mathrm{E}+1$ | 0 | $1.74 \mathrm{E}+2$ | 0 | 0 | 0 | 0 | $2.68 \mathrm{E}+0$ | 8.33E-3 | 6.87E-1 |
| NRPRM | kg | 4.21E+0 | $1.55 \mathrm{E}+0$ | 0 | $3.10 \mathrm{E}-2$ | 0 | 0 | 0 | $2.63 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPRE | MJ | $2.54 \mathrm{E}+1$ | 6.58E+0 | $6.95 \mathrm{E}-2$ | $1.46 \mathrm{E}-1$ | 0 | 6.26E+0 | 0 | $1.23 \mathrm{E}+1$ | 0 | 0 | 0 | 0 | 1.26E-2 | $2.58 \mathrm{E}-4$ | $1.77 \mathrm{E}-2$ |
| RPRM | kg | $1.33 \mathrm{E}+0$ | 5.57E-1 | 0 | 1.11E-2 | 0 | $2.75 \mathrm{E}-1$ | 0 | $4.84 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REDwPs | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADP frosil, $^{\text {E }}$ | MJ | $2.68 \mathrm{E}+2$ | 8.65E+1 | 4.78E+0 | 1.91E+0 | 0 | $1.65 \mathrm{E}+1$ | 0 | $1.54 \mathrm{E}+2$ | 0 | 0 | 0 | 0 | $2.66 \mathrm{E}+0$ | $8.12 \mathrm{E}-3$ | $6.77 \mathrm{E}-1$ |
| ADP ${ }_{\text {fosil, }}$ M | kg | 4.21E+0 | $1.55 \mathrm{E}+0$ | 0 | 3.10E-2 | 0 | 0 | 0 | $2.63 \mathrm{E}+0$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SM | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | $\mathrm{m}^{3}$ | $5.07 \mathrm{E}-1$ | 1.41E-1 | $9.94 \mathrm{E}-4$ | 2.96E-3 | 0 | $1.28 \mathrm{E}-1$ | 0 | $2.32 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 3.30E-4 | 7.99E-6 | 7.60E-4 |
| Waste* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HWD | kg | 7.09E-2 | $2.84 \mathrm{E}-2$ | 0 | 5.68E-4 | 0 | 0 | 0 | 4.19E-2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NHWD | kg | 4.76E+0 | 0 | 0 | $1.18 \mathrm{E}-1$ | 0 | 0 | 0 | $1.67 \mathrm{E}-1$ | 0 | 0 | 0 | 0 | 0 | 0 | 4.48E+0 |
| HLRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IWRW | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legend |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GWP G | Global warming potential ( GWP ${ }_{100}$ ) |  |  |  |  | SM Se |  | Secondary materials |  |  |  | B1 | Use |  |  |  |
| AP A |  |  |  |  |  | RSF Re |  | Renewable secondary fuels |  |  |  | B2 | Maintenance |  |  |  |
| EP E | Acidific ation potentialEutrophic ation potential |  |  |  |  | NRSF No |  | Non-renewable secondary fuels |  |  |  | B3 | Repair |  |  |  |
| SFP S | Smog formation potential |  |  |  |  | FW C |  | Consumption of fresh water |  |  |  | B4 | Replacement |  |  |  |
| ODP O | Ozone depletion potential |  |  |  |  | HWD Ha |  | Hazardous waste disposed |  |  |  | B5 | Refurbishment |  |  |  |
| NRPRE | Non-renewable primary resources used as an energy camier |  |  |  |  | NHWD No |  | Non-hazardous waste disposed |  |  |  | B6 | Operational energy use |  |  |  |
| NRPRM | Non-renewable primary resources with energy content used as a material |  |  |  |  | HLRW Hi |  | High-level radioactive waste |  |  |  | B7 | Operational water use |  |  |  |
| RPRE ${ }_{\text {E }}$ | Renewable primary resourcesused as an energy camier |  |  |  |  | IURW In |  | intermediate/low-level radioactive waste |  |  |  | C1 | De-construction/Demolition |  |  |  |
| RPRM R | Renewable primary resources with energy content used asa materialRecovered energy from disposal of waste in previous systems |  |  |  |  | A1-3 Prod |  | Production stage |  |  |  | C2 | Transport |  |  |  |
| REDwps R |  |  |  |  |  | A4 Tra |  | Transport to site |  |  |  | C3 | Waste processing |  |  |  |
| ADP fossil, $^{\text {E }}$ A | Abiotic depletion potential for fossil resources used as energy |  |  |  |  | A5 In |  | nstallation |  |  |  | C4 |  |  |  |  |

ADPfossil, Abiotic depletion potential for fossil resources used as materials
*Significant data limitationscurrently exist within the LCI data used to generate waste metrics for life cycle assessments and environmental product declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates (foreground only) and are for informational puposes only. As such, no decisions regarding actual cradle-to-grave waste performance between products should be derived from these reported values.

### 4.6. Life cycle impact assessment - intepretation

## Sikafloor ${ }^{\circledR}$ Smooth Epoxy (10-yr commercial market service life)

The interpretation of the Sika floor® Smooth Epoxy system results (Table 48) is presented in this section. Due to the high number of studied products, this system was selected as a typic al resinous floorcoating system for the interpretation.

## Potential environmental impact indic ators

As observed in Figure 3 for the resinous floor system, the replacement module (B4) is the ma in contributors to most indicators ( $60 \%$ to $68 \%$ of all impact indic ators). This is due mainly to the raw materials needed to manufacture the five recoats over 60 years, especially the epoxy resin. After the recoats, raw material supply of the first system (A1), ma inly epoxy resin, and maintenance ${ }^{2}$ (B2) contribute between $10 \%$ and $20 \%$ and between $3 \%$ and $14 \%$ of impact indicators, respectively. The production of cleaning agent (non-ionic surfactant) is the source of impacts during maintenance. All other modules are less significant, including Sika's operations. An exception is the smog formation indicator, which is related to VOC emissions. For this indic ator, the installation (A5) is similar in contribution to A1 and B2 due to the VOC content emission related to the first floor coating system, asit is taken into account during recoating (B4).


Figure 3: Relative contribution of life cycle modules to potential environmental impacts for $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of Sikafloor® Smooth Epoxy (average coverage, 10-yr commercial market senvice life) ${ }^{3}$

Use of resources indicators (total primary energy consumption and material resources consumption) For these indic a tors exc ept renewable primary energy as material, recoats (B4) and raw material supply (A1) forthe insta llation of the initial system account togetherfor between $61 \%$ and $99 \%$ for the indic ators. For the fresh water and the renewable primary energy indicators, the second most important module after recoating is maintenance (B2) for cleaning. Renewable primary energy as material is used exclusively during maintenance because of the surfactant partly produced from plants.

## Waste generation indicators

Most of disposed waste is attributed to the C4 module, the end of life, and is classified as non-hazardous. It includes the initial applied system, all applied recoats and all unused coating over the 60 -year period. A small a mount of hazardous waste is generated by the manufacturing (A3).

[^3]Sikafloor ${ }^{\circledR}$ NA PurCem ${ }^{\circledR}$ (20-yr industrial market senvice life)
The interpretation of the Sikafloor® NA PurCem ${ }^{\circledR}$ results (Table 35) is presented in this section. Due to the high number of studied products, this system was selected as a typical cementitious floor system for the interpretation.

## Potential environmental impact indic ators

The PurCem floor system is a thick cementitious system containing mostly cement and sand. Therefore, as observed in Figure 4, the life cycle impacts of the raw material supply (A1) for the initial system are significant, accounting for between 22 \% and $59 \%$ of the life cycle, compared to the recoats (B4). The raw material contributing the most to Al for the global warming indicator is the methylene diphenyl diisocyanate (MDI), a precursor of polyurethane. After the A1 module, the remaining modules of the production stage, that is to say transport of raw materials (A2), manufacturing (A3), a nd transport to the project site (A4), contribute together to between $18 \%$ and $59 \%$ of the total over the life cycle. This important contribution is due to the material intensity per square meter of the system due to its thickness. The production of cleaning agent ${ }^{4}$ (non-ionic surfactant) is the source of impacts during maintenance, which is signific ant for one indic ator.
The PurCem system uses mainly low-VOC components. Therefore, the installation (A5) and the recoats (B4) a c count for only 17 \% of the Smog formation indicator.


Figure 4: Relative contribution of life cycle modules to potential environmental impacts for $\mathbf{1} \mathbf{m}^{\mathbf{2}}$ of Sikafloor ${ }^{\circledR}$ NA PurCem ${ }^{\circledR}$ (average coverage, $20-y r$ industrial market senvice life) ${ }^{5}$

Use of resources indicators (total primary energy consumption and material resources consumption) The material use indic ators are dominated by the A1 module ( $57 \%-77 \%$ ). For energy use indic ators, the contribution of A1 goes down between $34 \%$ and $53 \%$ since energy isconsumed in many other modules. Manufacturing (A3) consumes significant renewable primary energy because of the hydroelectricity consumed at the Quebec and the B.C. plants. Fresh water is mostly consumed during raw material supply (A1) a nd maintenance (B2).
Waste generation indicators
Most waste disposed is a ttributed to the C4 module, the end of life, and is classified as non-haza rdous. It includes the initial applied system, all applied recoats and all unused coating over the $60-\mathrm{yr}$ period. A small a mount of hazard ous waste is generated by the manufacturing (A3).

[^4]
## 5. Additional environmental information

This section provides additional relevant environmental information about the manufacturer and the floor systems that was not derived from the LCA.

## Sika's Commitment to sustainability

Providing long lasting and high-performance solutions to the benefit of our customers, Sika is committed to pioneering susta inable solutionsthat a re safer, have the lowest impact on resourc esand addressglobal environmental challenges. Therefore, Sika assumes the responsibility to provide sustainable solutions in order to improve material, water and energy effic iency in construction and transportation. Sika strives to create more value for all its stakeholders with its products, systems a nd solutions along the whole value chain and throughout the entire life span of its products. Sika is committed to measure, improve and communicate sustainable value creation: "More value, less impact" refers to the company's commitment to maximize the value of its solutions to all stakeholders while reducing resource consumption and impact on the environment.

With the aim of enhancing utility and reducing impacts, the compa ny continues to work on its six strategic target areas, namely economic performance, sustainable solutions, local communities/society, energy, waste/water, and occupational safety. Year after year, Sika honors its responsibility through reporting its performance in a sustainability report in line with the highest standards, the Global Reporting Initiative (GRI). More particularly, the implementation of life-cycle thinking throughout all phases from product development to the use of the productsby customers marks Sika 'sgoal to move away from being a mere product supplier to a provider of innovative solutions which enhances the efficiency, durability, and aesthetic appeal of buildings, infrastructure, and installations.

## VOC content

System components covered by this EPD conta in between 0 and 200 grams of VOC per litre, which is in conformity with national standards and LEED requirements (see Table 61 for detailed VOC content per component). The VOC content wasmeasured according to EPA 24 or ASTM D2369 standard methods.

## Table 61: VOC content of components

| Components | VOC content (g/L) |
| :---: | :---: |
| Quartz aggregate (generic) | Not available. Not expected to contain VOCs. |
| Scofield ${ }^{\text {® }}$ Formula One ${ }^{\text {TM }}$ Guard-W | <100 |
| Scofield ${ }^{\text {® }}$ Formula One ${ }^{\text {™ }}$ Liquid Dye Concentrate | <11 |
| Scofield ${ }^{\text {® }}$ Formula One $^{\text {™ }}$ Lithium Densifier MP | 0 |
| Sika ${ }^{\oplus}$ MTPrimer | $\leq 50$ |
| Sikafloor ${ }^{\text {® }}$ Aggregate PT | Not available. Not expected to contain VOCs. |
| Sikafloor ${ }^{\text {® }}$ Comfort Adhesive | 0 |
| Sikafloor ${ }^{\text {® }}$ C omfort Porefiller | 0 |
| Sikafloor ${ }^{\text {® }}$ C omfort Regupol-6015 | 0 |
| Sikafloor® ${ }^{\text {® }}$ Dec oFlake ${ }^{\text {® }}$ | 0 |
| Sikafloor ${ }^{\otimes}$ Duochem-305 | 195-200 |
| Sikafloor® Duochem-6001 | 99 |
| Sikafloor® Duochem-9200 | 1 |
| Sikafloor® Duochem-9205 | 1 |
| Sikafloor ${ }^{\text {® }}$ Fastflor ${ }^{\text {® }}$ CR | $\leq 5$ |


| Components | VOC content (g/ L) |
| :---: | :---: |
| Sika floor ${ }^{\text {® }}$ Terrazzo | $\leq 50$ |
| Sika floor® ${ }^{\circledR}$ Trowel Quartz Aggregate | Not available. Not expected to contain VOCs. |
| Sika floor ${ }^{\text {® }}$ 156CA | $\leq 25$ |
| Sika floor®-1610 | $\leq 50$ |
| Sikafloor®-2002 | $\leq 25$ |
| Sika floor®-217 | ~56 |
| Sikafloor®-22 NA PurCem ${ }^{\circledR}$ | $\leq 5$ |
| Sikafloor®-222 W ESD | $\sim 1$ |
| Sika floor®-260 ESD | $\leq 15$ |
| Sika floor ${ }^{\text {® }}$ 261 ${ }^{\text {CA }}$ | <50 |
| Sika floor ${ }^{\text {®-2 }} 270$ ESD | $\leq 25$ |
| Sikafloor ${ }^{\text {®-304 W NA }}$ | 69 |
| Sikafloor®-305 W NA | 30 |
| Sikafloor®-31 NA PurCem ${ }^{\circledR}$ | $\leq 10$ |
| Sikafloor®-33 NA PurCem ${ }^{\circledR}$ | $\leq 10$ |
| Sika floor®-330 | 10 |
| Sikafloor®-52 PC Grey | 0 |
| Sikafloor ${ }^{\text {®-5 }}$ P PC White | 0 |
| Sikalastic ${ }^{\text {®-1 }} 120$ FS Primer | 45 |
| Sikalastic ${ }^{\circledR}-220$ FS | $<20$ |
| Sikalastic ${ }^{\circledR}$-390 Membrane | 3 |
| Sikalastic ${ }^{\text {®-391 }}$ N | 14 |

## Waste packaging management

Sika Canada encourages its customers to responsibly dispose of used packaging. Most of them are recyclable. To make recycling easier, it is recommended to separate used packaging according to their material (paper, plastic and metal). Ask information to local municipalities about recycling programs for industrial coating packaging.

## 6. GLOSSARY

### 6.1. Acronyms

| ADP ${ }_{\text {fossil, }}$ | Abiotic depletion potential for fossil resources used as energy |
| :---: | :---: |
| ADP frossi, $^{\text {M }}$ | Abiotic depletion potential for fossil resources used as materials |
| AP | Acidific ation potential |
| CSA | Canadian Standards Association |
| EP | Eutrophication potential |
| FW | Consumption of fresh water |
| GHG | Greenhouse gas |
| GWP | Global warming potential |
| HLRW | High-level radioactive waste |
| HWD | Haza rdous waste disposed |
| IWRW | Intemediate/low-level radioa ctive waste |
| ISO | Intemational Organization for Sta nda rdization |
| kg CFC-11 eq. | Kilogram of tric hlorofluoromethane equiva lent |
| kg CO2 eq. | Kilogram of carbon dioxide equivalent |
| kg Neq . | Kilogram of nitrogen equivalent |
| $\mathrm{kg} \mathrm{O}_{3} \mathrm{eq}$. | Kilogram of ozone equivalent |
| kg SO2 eq. | Kilogram of sulphur dioxide equivalent |
| L | litre |
| LCA | Life c ycle assessment |
| LFED | Leadership in Energy and Environmental Design |
| UHV | Lowerheating value |
| MJ | Megajoule |
| $\mathrm{m}^{2}$ | Square meter |
| $\mathrm{m}^{3}$ | Cubic meter |
| NHMD | Non-haza rdous waste disposed |
| NRPRE | Non-renewable primary resourcesused as an energy camier |
| NRPRM | Non-renewable primary resources with energy content used as a material |
| NRSF | Non-renewable secondary fuels |
| ODP | Ozone depletion potential |
| PCR | Product category rules |
| REDWPS | Rec overed energy from disposal of waste in previous systems |
| RPRE | Renewable primary resources used a san energy camier |
| RPRM | Renewable primary resources with energy content used as a material |
| RSF | Renewable secondary fuels |
| SFP | Smog formation potential |
| SM | Secondary materials |
| VOC | Volatile organic compound |

### 6.2. Environmental impact c ategories and parameters assessed

The acidification potential refersto the change in acidity (i.e. reduction in pH ) in soil and waterdue to human activity. The increase in $\mathrm{NO}_{x}$ and $\mathrm{SO}_{2}$ emissions generated by the transportation, manufacturing and energy sectors are the main causes of this impact category. The acidification of land and water has multiple consequences: degradation of aquatic and terrestrial ecosystems, endangering numerous species and food security. The concentration of the gases responsible for the a cidific ation is expressed in sulphur dioxide equivalents ( $\mathbf{k g} \mathbf{S O}_{2}$ equivalent).

The eutrophication potential measures the enric hment of an aquatic or terrestrial ecosystem due to the release of nutrients (e.g. nitrates, phosphates) resulting from natural or human activity (e.g. the discharge of wastewater into waterc ourses). In an aquatic environment, this activity results in the growth of algae which consume dissolved oxygen present in water when they degrade a nd thus affect spec iessensitive to the concentration of dissolved oxygen. Also, the increase in nutrients in soils makes it diffic ult for the terrestrial environment to manage the excess of biomass produced. The concentration of nutrients causing this impact is expressed in nitrogen equivalents (kg $\mathbf{N}$ equivalent).

Net fresh water consumption accounts for the imbalance in the natural water cycle created by the water eva porated, consumed by a system or released to a different watershed (i.e. not its original source). This imbalance can cause water scarcity and affect biodiversity. This indicator refers to the waste of the resource rather than its pollution. Also, it does not refer to water that is used but retumed to the original source (e.g. water for hydroelectric turbines, cooling or river transportation) or lost from a natural system (e.g. due to evaporation of rainwater). The quantity of freshwaterconsumed is expressed as a volume of water in meter cube ( $\mathrm{m}^{3}$ of waterconsumed).

The global warming potential refers to the impact of a temperature increase on the global climate pattems (e.g. severe flooding and drought events, accelerated melting of glaciers) due to the release of greenhouse gases (G HG) (e.g. carbon dioxide and methane from fossil fuel combustion). GHG emissions contribute to the increase in the absorption of radiation from the sun at the earth's surface. These emissions are expressed in units of kg of carbon dioxide equivalents ( $\mathrm{kg} \mathrm{CO}_{2}$ equivalent).

The ozone depletion potential indic ator measures the potential of stratospheric ozone level reduction due to the release of some molec ules such as refrigerants used in cooling systems (e.g. chlorofluorocarbons). When they react with ozone $\left(\mathrm{O}_{3}\right)$, the ozone concentration in the stratosphere diminishes and isno longer suffic ient to absorb ultra violet (UV) radiation which can cause high risks to human health (e.g. skin cancers and cataracts) and the terrestrial environment. The concentration of molecules that are responsible of ozone depletion is expressed in kilograms of trichlorofluoromethane equivalents (kg CFC-11 equivalent).

The smog formation potential indic ator covers the emissions of pollutants such as nitrogen oxidesa nd volatile organic compounds (VOCs) into the atmosphere. They are mainly generated by motor vehicles, power plants and industrial facilities. When reacting with the sunlight, these pollutants create smog which can affect human health and cause various respiratory problems. The concentration of pollutants causing smog are expressed in kg of ozone equivalents ( $\mathrm{kg} \mathrm{O}_{3}$ equivalent).

The renewable/non-renewable primary energy consumption parameters refer to the use of energy from renewable resources(e.g., wind, solar, hydro) a nd non-renewable resources (e.g., natural gas, coal, petroleum). The quantity of primary energy used is expressed in megajoules, on the basis of the lower heating value of the resources (MJ, LHV).

The renewable/ non-renewable material resources consumption parameters represent the quantity of material made from renewable resources or non-renewable resources used to manufacture a product, excluding recovered or recycled materials. The quantity of these resources is reported in kilograms (kg).

## 7. REFERENCES

CSA Group (2013). CSA Group Environmental Product Declaration (EPD) Program. Program Requirements. Retrieved from http://www.csaregistries.ca/assets/pdf/EPD_Registry_Program_Requirements.pdf

CSA (2007). CAN/CSA-ISO 14025:07 Environmental labels and declarations- Type III environmental declarations- Principles and procedures.

CSA (2009). CAN/CSA-ISO 14020:99 Environmental labels and declarations - General principles.
ecoinvent (2017). ecoinvent 3.4. https://www.ec oinvent.org/database/older-versions/ecoinvent34/ec oinvent-34.html

Groupe AGÉCO (2019). Life cycle assessment of Sika floor and wall coating systems and components for environmental product declarations.

ISO (2006a). ISO 14040. Environmental management - life cycle assessment - principles and framework. Intemational Standard Organization, Geneva, Switzerland.

ISO (2006b). ISO 14044. Environmental management - life cycle assessment - requirements and guidelines. Intemational Sta ndard Orga nization, Geneva, Switzerla nd.

ISO (2017). ISO 21930. Susta ina bility in build ing construction -- Environmental declaration of building products. Intemational Sta ndard Organization, Geneva, Switzerland.

NSF Intemational (2018). Product Category Rule for Environmental Product Declarations. ACA PCR for Resinous Floor Coatings.
[US EPA] United States Environmental Protection Agency (2012). Tool for the Reduction and Assessment of Chemical and other Environmental Impacts (TRACI) User's Manual. Retrieved from http://nepis.epa.gov/Adobe/PDF/P100HN53.pdf


[^0]:    Notes:
    "2.8E-1" means 0.28.
    GWP = Global warming potential (GWP100); AP = Acidification potential; EP = Eutrophication potential; SFP = Smog formation potential; ODP = Ozone depletion potential.

[^1]:    Notes:
    "2.8E-1" means 0.28.
    $G W P=$ Global warming potential (GWP100); AP = Acidification potential; EP = Eutrophication potential; SFP = Smog formation potential; ODP = Ozone depletion potential.

[^2]:    ${ }^{1}$ Components are usually sold in two or three separate parts that are mixed on site prior to application. When this is the case, the part in which the ingredient is contained is indicated with a letter.

[^3]:    ${ }^{2}$ Cleaning was modelled according to the PCR for resinous floor coatings and is the same for all systems, although floor coating systems have different cleaning needs.
    ${ }^{3}$ Modules $\mathrm{B} 1, \mathrm{~B} 3, \mathrm{~B} 5, \mathrm{~B} 6, \mathrm{~B} 7$ and C 1 are null.

[^4]:    ${ }^{4}$ Cleaning was modelled according to the PCR for resinous floor coatings and is the same for all systems, although floor coating systems have different cleaning needs.
    ${ }^{5}$ Modules $\mathrm{B} 1, \mathrm{~B} 3, \mathrm{~B} 5, \mathrm{~B} 6, \mathrm{~B} 7$ and C 1 are null.

