## Environmental Profile

This LCA is calculated according to: ISO 14044, ISO 14040 and EN 15804

## Ecochain

| Product: | $3003265-$ PVC Endcap GY 110 +Inspection cover |
| :--- | :--- |
| Unit: | 1 piece |
| Manufacturer: | Wavin - PL -Buk - Extra products |

LCA standard:

Standard database:
Externally verified:
Issue date:
End of validity:
Verifier:

## EN15804+A2 (2019)

Worldwide - Ecoinvent v 3.6 Cut-Off
Yes
08-06-2023
08-06-2028
Martijn van Hövell - SGS Search
wavin
An Orbia business.

SGS SEARCH Myll̈=

This LCA was evaluated according to EN15804+A2. It was concluded that the LCA complies with this standard

The LCA background information and project dossier have been registered in the online Ecochain application in the account Wavin - PL -Buk - Extra products (2020). ( $\square=$ module declared, MND = module not declared).


A5 Assembly / Construction installation process
D Reuse- Recovery- Recycling- potential
Environmental impacts and parameters





Statement of Confidentiality


## Results

|  | Environmental impact | Unit | A1 | A2 | A3 | A1-A3 | C2 | C3 | C4 | D | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GWP-total |  | kg CO2 eq | 6.88E-1 | $1.02 \mathrm{E}-2$ | $1.45 \mathrm{E}-4$ | 6.99E-1 | $8.64 \mathrm{E}-3$ | $4.14 \mathrm{E}-1$ | $2.90 \mathrm{E}-3$ | -3.85E-1 | 7.39E-1 |
| GWP-f |  | kg CO2 eq | 7.81E-1 | $1.02 \mathrm{E}-2$ | $1.46 \mathrm{E}-4$ | 7.91E-1 | 8.63E-3 | 3.01E-1 | $2.90 \mathrm{E}-3$ | -4.14E-1 | 6.90E-1 |
| GWP-b |  | kg CO2 eq | -9.31E-2 | 6.20E-6 | -1.54E-6 | -9.31E-2 | $5.24 \mathrm{E}-6$ | $1.14 \mathrm{E}-1$ | $3.58 \mathrm{E}-6$ | 2.91E-2 | $4.95 \mathrm{E}-2$ |
| GWP-luluc |  | kg CO2 eq | 8.69E-4 | 3.61E-6 | 1.49E-7 | 8.72E-4 | 3.06E-6 | $1.06 \mathrm{E}-4$ | 7.50E-8 | -5.01E-4 | 4.80E-4 |
| ODP |  | $\mathrm{kg} \mathrm{CFC11} \mathrm{eq}$ | 3.76E-7 | $2.35 \mathrm{E}-9$ | $8.26 \mathrm{E}-12$ | 3.78E-7 | $1.99 \mathrm{E}-9$ | $2.93 \mathrm{E}-8$ | $1.05 \mathrm{E}-10$ | -1.87E-7 | $2.23 \mathrm{E}-7$ |
| AP |  | mol $\mathrm{H}+\mathrm{eq}$ | 3.81E-3 | 5.81E-5 | $1.47 \mathrm{E}-6$ | 3.87E-3 | 4.92E-5 | $5.09 \mathrm{E}-4$ | $2.57 \mathrm{E}-6$ | -1.62E-3 | 2.81E-3 |
| EP-fw |  | kg Peq | 3.59E-5 | 8.40E-8 | $8.24 \mathrm{E}-9$ | 3.60E-5 | 7.10E-8 | $3.55 \mathrm{E}-6$ | $3.39 \mathrm{E}-9$ | -1.66E-5 | 2.29E-5 |
| EP-m |  | kg Neq | 6.77E-4 | 2.08E-5 | $1.55 \mathrm{E}-7$ | 6.98E-4 | $1.76 \mathrm{E}-5$ | $1.26 \mathrm{E}-4$ | $1.78 \mathrm{E}-6$ | -2.99E-4 | 5.45E-4 |
| EP-T |  | mol Neq | 7.37E-3 | $2.29 \mathrm{E}-4$ | $1.85 \mathrm{E}-6$ | 7.60E-3 | $1.94 \mathrm{E}-4$ | $1.39 \mathrm{E}-3$ | 1.02E-5 | -3.25E-3 | 5.95E-3 |
| POCP |  | kg NMVOC eq | $2.47 \mathrm{E}-3$ | 6.55E-5 | 6.28E-7 | $2.53 \mathrm{E}-3$ | 5.54E-5 | $4.15 \mathrm{E}-4$ | $3.54 \mathrm{E}-6$ | -1.09E-3 | 1.91E-3 |
| ADP-mm |  | kg Sb eq | $7.14 \mathrm{E}-4$ | $2.64 \mathrm{E}-7$ | $1.97 \mathrm{E}-8$ | $7.14 \mathrm{E}-4$ | 2.23E-7 | $1.98 \mathrm{E}-6$ | $2.58 \mathrm{E}-9$ | -8.46E-6 | 7.08E-4 |
| ADP-f |  | MJ | $1.90 \mathrm{E}+1$ | $1.57 \mathrm{E}-1$ | $1.36 \mathrm{E}-3$ | $1.92 \mathrm{E}+1$ | $1.33 \mathrm{E}-1$ | $1.36 \mathrm{E}+0$ | $7.70 \mathrm{E}-3$ | -9.67E+0 | $1.10 \mathrm{E}+1$ |
| WDP |  | m3 depriv. | $1.14 \mathrm{E}+0$ | 4.81E-4 | 5.22E-5 | $1.14 \mathrm{E}+0$ | 4.07E-4 | 5.36E-2 | 5.22E-5 | -5.67E-1 | $6.28 \mathrm{E}-1$ |
| PM |  | disease inc. | $2.90 \mathrm{E}-8$ | 9.21E-10 | 9.08E-12 | $2.99 \mathrm{E}-8$ | 7.79E-10 | $6.24 \mathrm{E}-9$ | 5.30E-11 | -1.35E-8 | $2.35 \mathrm{E}-8$ |
| IR |  | kBq U-235 eq | $4.42 \mathrm{E}-2$ | 6.85E-4 | $1.02 \mathrm{E}-6$ | $4.49 \mathrm{E}-2$ | 5.79E-4 | $4.80 \mathrm{E}-3$ | 3.54E-5 | -1.95E-2 | $3.08 \mathrm{E}-2$ |
| ETP-fw |  | CTUe | $2.33 \mathrm{E}+1$ | 1.27E-1 | 1.21E-2 | $2.34 \mathrm{E}+1$ | $1.08 \mathrm{E}-1$ | 1.05E+1 | $1.15 \mathrm{E}-1$ | -7.80E+0 | $2.63 \mathrm{E}+1$ |
| HTP-c |  | ctun | 6.84E-10 | $4.53 \mathrm{E}-12$ | 6.17E-13 | $6.89 \mathrm{E}-10$ | 3.83E-12 | 1.55E-10 | 2.14E-13 | -2.46E-10 | 6.02E-10 |
| HTP-nc |  | CTUn | 2.07E-8 | 1.52E-10 | $1.57 \mathrm{E}-11$ | $2.09 \mathrm{E}-8$ | 1.28E-10 | 3.66E-9 | 2.23E-11 | -7.52E-9 | $1.72 \mathrm{E}-8$ |
| SQP |  | Pt | $1.23 \mathrm{E}+1$ | $1.34 \mathrm{E}-1$ | $2.24 \mathrm{E}-3$ | $1.25 \mathrm{E}+1$ | $1.13 \mathrm{E}-1$ | $8.29 \mathrm{E}-1$ | $1.97 \mathrm{E}-2$ | -1.36E+1 | -1.65E-1 |
|  | Resource use | Unit | A1 | A2 | A3 | A1-A3 | C2 | C3 | C4 | D | Total |
| PERE |  | MJ | $4.22 \mathrm{E}+0$ | $2.25 \mathrm{E}-3$ | 2.40E-2 | 4.25E+0 | $1.90 \mathrm{E}-3$ | $9.74 \mathrm{E}-2$ | $2.90 \mathrm{E}-4$ | $-2.45 \mathrm{E}+0$ | $1.89 \mathrm{E}+0$ |
| PERM |  | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PERT |  | MJ | $4.22 \mathrm{E}+0$ | $2.25 \mathrm{E}-3$ | $2.40 \mathrm{E}-2$ | 4.25E+0 | 1.90E-3 | $9.74 \mathrm{E}-2$ | 2.90E-4 | -2.45E+0 | $1.89 \mathrm{E}+0$ |
| PENRE |  | MJ | $2.04 \mathrm{E}+1$ | $1.66 \mathrm{E}-1$ | $1.44 \mathrm{E}-3$ | $2.05 \mathrm{E}+1$ | 1.41E-1 | $1.44 \mathrm{E}+0$ | 8.17E-3 | -1.04E+1 | 1.17E+1 |
| PENRM |  | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PENRT |  | MJ | $2.04 \mathrm{E}+1$ | $1.66 \mathrm{E}-1$ | $1.44 \mathrm{E}-3$ | $2.05 \mathrm{E}+1$ | 1.41E-1 | $1.44 \mathrm{E}+0$ | $8.17 \mathrm{E}-3$ | -1.04E+1 | 1.17E+1 |
| PET |  | MJ | $2.46 \mathrm{E}+1$ | $1.69 \mathrm{E}-1$ | $2.55 \mathrm{E}-2$ | $2.48 \mathrm{E}+1$ | $1.43 \mathrm{E}-1$ | $1.54 \mathrm{E}+0$ | $8.46 \mathrm{E}-3$ | -1.29E+1 | $1.36 \mathrm{E}+1$ |
| SM |  | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RSF |  | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF |  | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW |  | m3 | 1.37E-2 | 1.77E-5 | $1.46 \mathrm{E}-6$ | $1.37 \mathrm{E}-2$ | $1.50 \mathrm{E}-5$ | 1.52E-3 | $9.43 \mathrm{E}-6$ | -6.73E-3 | 8.53E-3 |


|  | Output flows and waste categories | Unit | A1 | A2 | A3 | A1-A3 | C2 | C3 | C4 | D | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HWD |  | kg | 1.01E-4 | 4.00E-7 | $2.73 \mathrm{E}-13$ | 1.01E-4 | 3.39E-7 | $2.26 \mathrm{E}-6$ | $9.39 \mathrm{E}-9$ | -8.68E-6 | 9.50E-5 |
| NHWD |  | kg | 8.12E-2 | $9.71 \mathrm{E}-3$ | $1.05 \mathrm{E}-6$ | $9.09 \mathrm{E}-2$ | 8.21E-3 | 5.08E-2 | $3.38 \mathrm{E}-2$ | -3.41E-2 | 1.50E-1 |
| RWD |  | kg | 4.12E-5 | 1.07E-6 | 1.10E-13 | 4.23E-5 | 9.01E-7 | 5.17E-6 | 5.01E-8 | -1.77E-5 | 3.07E-5 |
| CRU |  | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MFR |  | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MER |  | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EE |  | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EET |  | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EEE |  | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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