# Environmental Profile

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

Ecochain v3.5.64

| | |
|---|---|
| Product: | 3065582 - PE Pipe Cable BK 50 L=100 SRE-P VA |
| Unit: | 1 piece |
| Manufacturer: | Wavin - SE - Eskilstuna |

Wavin offers double-walled cable conduits in several diameters and in both waterproof and non-waterproof versions. The corrugated outer wall ensures a high ring stiffness, while the smooth inner wall makes the pipes optimal for cable pulling.

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|---|---|
| LCA standard: | EN15804+A2 (2019) |
| Standard database: | Worldwide - Ecoinvent v 3.6 Cut-Off |
| Externally verified: | Yes |
| Issue date: | 20-06-2022 |
| End of validity: | 20-06-2027 |
| Verifier: | Harry van Ewijk - SGS Search |

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 - SE - Eskilstuna (2020). (☑ = module declared, MND = module not declared).

| A1 | A2 | A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ☑ | ☑ | ☑ | MND | MND | MND | MND | MND | MND | MND | MND | MND | MND | ☑ | ☑ | ☑ | ☑ |

**Product stage**

A1 Raw material supply A2 Transport A3 Manufacturing

**Construction process stage**

A4 Transport gate to site
A5 Assembly / Construction installation process

**Use stage**

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
B6 Operational energy use B7 Operational water use

**End-of-Life stage**

C1 De-construction demolition C2 Transport C3 Waste processing
C4 Disposal

**Benefits and loads beyond the system boundaries**

D Reuse- Recovery- Recycling- potential

## Environmental impacts and parameters

**GWP-total** = EF Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF Climate Change - Land use and LU change [kg CO2 eq]; **ODP** = EF Ozone depletion [kg CFC11 eq]; **AP** = EF Acidification [mol H+ eq]; **EP-fw** = EF Eutrophication, freshwater [kg P eq]; **EP-m** = EF Eutrophication, marine [kg N eq]; **EP-T** = EF Eutrophication, terrestrial [mol N eq]; **POCP** = EF Photochemical ozone formation [kg NMVOC eq]; **ADP-mm** = EF Resource use, minerals and metals [kg Sb eq]; **ADP-f** = EF Resource use, fossils [MJ]; **WDP** = EF Water use [m3 depriv.]; **PM** = EF Particulate matter [disease inc.]; **IR** = EF Ionising radiation [kBq U-235 eq]; **ETP-fw** = EF Ecotoxicity, freshwater [CTUe]; **HTP-c** = EF Human toxicity, cancer [CTUh]; **HTP-nc** = EF Human toxicity, non-cancer [CTUh]; **SQP** = EF Land use [Pt]; **PERE** = Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]; **PERM** = Use of renewable primary energy resources used as raw materials [MJ]; **PERT** = Total use of renewable primary energy resources [MJ]; **PENRE** = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]; **PENRM** = Use of non-renewable primary energy resources used as raw materials [MJ]; **PENRT** = Total use of non-renewable primary energy resources [MJ]; **PET** = Total energy [MJ]; **SM** = Use of secondary material [kg]; **RSF** = Use of renewable secondary fuels [MJ]; **NRSF** = Use of non-renewable secondary fuels [MJ]; **FW** = Use of net fresh water [m3]; **HWD** = Hazardous waste disposed [kg]; **NHWD** = Non-hazardous waste disposed [kg]; **RWD** = Radioactive waste disposed [kg]; **CRU** = Components for re-use [kg]; **MFR** = Materials for recycling [kg]; **MER** = Materials for energy recovery [kg]; **EE** = Exported energy [MJ]; **EET** = Exported energy thermic [MJ]; **EEE** = Exported energy electric [MJ]

## Statement of Confidentiality

# Results

| Environmental impact | Unit | A1 | A2 | A3 | A1-A3 | C2 | C3 | C4 | D | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| GWP-total | kg CO2 eq | 1.17E+2 | 1.22E+1 | 5.06E+0 | 1.34E+2 | 1.89E+0 | 9.54E+1 | 1.04E+0 | -9.50E+1 | 1.37E+2 |
| GWP-f | kg CO2 eq | 1.50E+2 | 1.22E+1 | 3.67E+0 | 1.66E+2 | 1.88E+0 | 6.15E+1 | 1.04E+0 | -9.46E+1 | 1.36E+2 |
| GWP-b | kg CO2 eq | -3.33E+1 | -7.59E-4 | 9.66E-1 | -3.23E+1 | 1.14E-3 | 3.39E+1 | 7.82E-4 | -3.56E-1 | 1.26E+0 |
| GWP-luluc | kg CO2 eq | 6.63E-2 | 7.21E-3 | 4.27E-1 | 5.00E-1 | 6.67E-4 | 1.07E-2 | 1.52E-5 | -2.63E-2 | 4.85E-1 |
| ODP | kg CFC11 eq | 4.60E-6 | 2.53E-6 | 4.16E-7 | 7.55E-6 | 4.34E-7 | 1.42E-6 | 2.23E-8 | -4.63E-6 | 4.79E-6 |
| AP | mol H+ eq | 5.71E-1 | 2.95E-1 | 3.11E-2 | 8.97E-1 | 1.07E-2 | 6.12E-2 | 5.32E-4 | -2.76E-1 | 6.94E-1 |
| EP-fw | kg P eq | 2.79E-3 | 7.33E-5 | 6.78E-5 | 2.93E-3 | 1.55E-5 | 3.09E-4 | 6.96E-7 | -1.22E-3 | 2.03E-3 |
| EP-m | kg N eq | 1.01E-1 | 7.49E-2 | 9.22E-3 | 1.85E-1 | 3.84E-3 | 1.83E-2 | 3.74E-4 | -5.21E-2 | 1.56E-1 |
| EP-T | mol N eq | 1.16E+0 | 8.32E-1 | 1.01E-1 | 2.09E+0 | 4.23E-2 | 2.02E-1 | 2.16E-3 | -6.02E-1 | 1.74E+0 |
| POCP | kg NMVOC eq | 5.21E-1 | 2.18E-1 | 2.81E-2 | 7.66E-1 | 1.21E-2 | 6.29E-2 | 8.46E-4 | -2.60E-1 | 5.82E-1 |
| ADP-mm | kg Sb eq | 2.09E-3 | 1.60E-4 | 1.10E-4 | 2.36E-3 | 4.87E-5 | 2.33E-4 | 5.36E-7 | -6.18E-4 | 2.02E-3 |
| ADP-f | MJ | 5.12E+3 | 1.65E+2 | 3.65E+1 | 5.33E+3 | 2.89E+1 | 1.87E+2 | 1.63E+0 | -2.83E+3 | 2.71E+3 |
| WDP | m3 depriv. | 1.18E+2 | 3.64E-1 | 2.35E+1 | 1.42E+2 | 8.87E-2 | 3.64E+0 | 8.14E-3 | -5.50E+1 | 9.06E+1 |
| PM | disease inc. | 6.18E-6 | 6.04E-7 | 5.25E-7 | 7.31E-6 | 1.70E-7 | 9.85E-7 | 1.12E-8 | -2.33E-6 | 6.14E-6 |
| IR | kBq U-235 eq | 3.80E+0 | 7.04E-1 | 1.08E-1 | 4.61E+0 | 1.26E-1 | 5.66E-1 | 7.57E-3 | -1.74E+0 | 3.57E+0 |
| ETP-fw | CTUe | 1.04E+3 | 1.21E+2 | 1.02E+2 | 1.26E+3 | 2.35E+1 | 2.12E+2 | 1.43E+0 | -5.49E+2 | 9.49E+2 |
| HTP-c | CTUh | 5.50E-8 | 6.43E-9 | 4.02E-9 | 6.54E-8 | 8.36E-10 | 2.75E-8 | 4.00E-11 | -2.16E-8 | 7.22E-8 |
| HTP-nc | CTUh | 1.09E-6 | 1.12E-7 | 1.10E-7 | 1.31E-6 | 2.80E-8 | 3.23E-7 | 9.15E-10 | -4.97E-7 | 1.16E-6 |
| SQP | Pt | 3.29E+3 | 6.50E+1 | 4.80E+0 | 3.36E+3 | 2.47E+1 | 1.49E+2 | 4.17E+0 | -7.49E+2 | 2.79E+3 |
| Resource use | Unit | A1 | A2 | A3 | A1-A3 | C2 | C3 | C4 | D | Total |
| PERE | MJ | 5.50E+2 | 1.45E+0 | 2.30E+2 | 7.82E+2 | 4.15E-1 | 9.15E+0 | 6.40E-2 | -1.74E+2 | 6.18E+2 |
| PERM | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PERT | MJ | 5.50E+2 | 1.45E+0 | 2.30E+2 | 7.82E+2 | 4.15E-1 | 9.15E+0 | 6.40E-2 | -1.74E+2 | 6.18E+2 |
| PENRE | MJ | 5.50E+3 | 1.76E+2 | 3.87E+1 | 5.71E+3 | 3.07E+1 | 1.99E+2 | 1.73E+0 | -3.05E+3 | 2.89E+3 |
| PENRM | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PENRT | MJ | 5.50E+3 | 1.76E+2 | 3.87E+1 | 5.71E+3 | 3.07E+1 | 1.99E+2 | 1.73E+0 | -3.05E+3 | 2.89E+3 |
| PET | MJ | 6.05E+3 | 1.77E+2 | 2.69E+2 | 6.49E+3 | 3.11E+1 | 2.08E+2 | 1.79E+0 | -3.23E+3 | 3.51E+3 |
| 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 | 1.83E+0 | 1.27E-2 | 5.58E-1 | 2.40E+0 | 3.27E-3 | 1.10E-1 | 2.01E-3 | -8.43E-1 | 1.68E+0 |

| Output flows and waste categories | Unit | A1 | A2 | A3 | A1-A3 | C2 | C3 | C4 | D | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| HWD | kg | 9.85E-4 | 2.45E-4 | 5.55E-5 | 1.29E-3 | 7.39E-5 | 3.07E-4 | 1.96E-6 | -8.52E-4 | 8.17E-4 |
| NHWD | kg | 7.24E+0 | 3.94E+0 | 1.70E-1 | 1.14E+1 | 1.79E+0 | 9.69E+0 | 7.16E+0 | -2.58E+0 | 2.74E+1 |
| RWD | kg | 3.47E-3 | 1.13E-3 | 1.54E-4 | 4.75E-3 | 1.97E-4 | 7.19E-4 | 1.06E-5 | -1.62E-3 | 4.06E-3 |
| 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 |

Ecochain

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