

# Environmental Profile

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

Ecochain v3.5.64



Product: 3064633 - PE Pipe Cable BK 32 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.

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                                                                |    |    |     |     | Use stage                                                                                                             |     |     |     |     |     |     | End-of-Life stage                                                             |    |    |    |   |
| A1 Raw material supply A2 Transport A3 Manufacturing                         |    |    |     |     | B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment<br>B6 Operational energy use B7 Operational water use |     |     |     |     |     |     | C1 De-construction demolition C2 Transport C3 Waste processing<br>C4 Disposal |    |    |    |   |
| Construction process stage                                                   |    |    |     |     | Benefits and loads beyond the system boundaries                                                                       |     |     |     |     |     |     |                                                                               |    |    |    |   |
| A4 Transport gate to site<br>A5 Assembly / Construction installation process |    |    |     |     | 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

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# Results

| Environmental impact | Unit         | A1      | A2       | A3      | A1-A3   | C2       | C3       | C4       | D        | Total   |
|----------------------|--------------|---------|----------|---------|---------|----------|----------|----------|----------|---------|
| GWP-total            | kg CO2 eq    | 5.60E+1 | 4.67E+0  | 1.95E+0 | 6.26E+1 | 7.26E-1  | 2.36E+1  | 4.01E-1  | -3.64E+1 | 5.10E+1 |
| GWP-f                | kg CO2 eq    | 5.57E+1 | 4.67E+0  | 1.41E+0 | 6.18E+1 | 7.26E-1  | 2.36E+1  | 4.02E-1  | -3.62E+1 | 5.04E+1 |
| GWP-b                | kg CO2 eq    | 2.90E-1 | -3.14E-4 | 3.72E-1 | 6.61E-1 | 4.41E-4  | -2.89E-2 | 3.01E-4  | -1.37E-1 | 4.96E-1 |
| GWP-luluc            | kg CO2 eq    | 1.77E-2 | 2.76E-3  | 1.64E-1 | 1.85E-1 | 2.57E-4  | 4.08E-3  | 5.85E-6  | -8.24E-3 | 1.81E-1 |
| ODP                  | kg CFC11 eq  | 1.49E-6 | 9.66E-7  | 1.60E-7 | 2.62E-6 | 1.67E-7  | 5.31E-7  | 8.58E-9  | -1.73E-6 | 1.59E-6 |
| AP                   | mol H+ eq    | 2.04E-1 | 1.13E-1  | 1.20E-2 | 3.30E-1 | 4.13E-3  | 2.23E-2  | 2.05E-4  | -1.00E-1 | 2.56E-1 |
| EP-fw                | kg P eq      | 9.65E-4 | 2.78E-5  | 2.61E-5 | 1.02E-3 | 5.97E-6  | 1.18E-4  | 2.68E-7  | -4.51E-4 | 6.92E-4 |
| EP-m                 | kg N eq      | 3.47E-2 | 2.88E-2  | 3.55E-3 | 6.70E-2 | 1.48E-3  | 6.49E-3  | 1.44E-4  | -1.83E-2 | 5.68E-2 |
| EP-T                 | mol N eq     | 3.93E-1 | 3.20E-1  | 3.90E-2 | 7.52E-1 | 1.63E-2  | 7.14E-2  | 8.32E-4  | -2.04E-1 | 6.36E-1 |
| POCP                 | kg NMVOC eq  | 1.86E-1 | 8.36E-2  | 1.08E-2 | 2.81E-1 | 4.66E-3  | 2.26E-2  | 3.26E-4  | -9.51E-2 | 2.13E-1 |
| ADP-mm               | kg Sb eq     | 7.63E-4 | 6.05E-5  | 4.26E-5 | 8.66E-4 | 1.88E-5  | 8.83E-5  | 2.06E-7  | -2.34E-4 | 7.39E-4 |
| ADP-f                | MJ           | 1.94E+3 | 6.30E+1  | 1.41E+1 | 2.02E+3 | 1.11E+1  | 7.07E+1  | 6.27E-1  | -1.09E+3 | 1.02E+3 |
| WDP                  | m3 depriv.   | 4.45E+1 | 1.38E-1  | 9.06E+0 | 5.37E+1 | 3.42E-2  | 1.39E+0  | 3.14E-3  | -2.11E+1 | 3.40E+1 |
| PM                   | disease inc. | 1.70E-6 | 2.29E-7  | 2.02E-7 | 2.13E-6 | 6.55E-8  | 3.67E-7  | 4.31E-9  | -7.95E-7 | 1.77E-6 |
| IR                   | kBq U-235 eq | 1.32E+0 | 2.68E-1  | 4.18E-2 | 1.63E+0 | 4.87E-2  | 2.13E-1  | 2.92E-3  | -6.55E-1 | 1.24E+0 |
| ETP-fw               | CTUe         | 3.35E+2 | 4.59E+1  | 3.92E+1 | 4.20E+2 | 9.05E+0  | 8.03E+1  | 5.52E-1  | -1.58E+2 | 3.52E+2 |
| HTP-c                | CTUh         | 1.61E-8 | 2.46E-9  | 1.55E-9 | 2.01E-8 | 3.22E-10 | 9.68E-9  | 1.54E-11 | -7.50E-9 | 2.26E-8 |
| HTP-nc               | CTUh         | 3.64E-7 | 4.24E-8  | 4.22E-8 | 4.48E-7 | 1.08E-8  | 1.21E-7  | 3.52E-10 | -1.68E-7 | 4.12E-7 |
| SQP                  | Pt           | 7.70E+1 | 2.44E+1  | 1.85E+0 | 1.03E+2 | 9.53E+0  | 5.65E+1  | 1.61E+0  | -3.44E+1 | 1.36E+2 |
| Resource use         | Unit         | A1      | A2       | A3      | A1-A3   | C2       | C3       | C4       | D        | Total   |
| PERE                 | MJ           | 3.32E+1 | 5.50E-1  | 8.86E+1 | 1.22E+2 | 1.60E-1  | 3.49E+0  | 2.47E-2  | -1.57E+1 | 1.10E+2 |
| PERM                 | MJ           | 0       | 0        | 0       | 0       | 0        | 0        | 0        | 0        | 0       |
| PERT                 | MJ           | 3.32E+1 | 5.50E-1  | 8.86E+1 | 1.22E+2 | 1.60E-1  | 3.49E+0  | 2.47E-2  | -1.57E+1 | 1.10E+2 |
| PENRE                | MJ           | 2.09E+3 | 6.69E+1  | 1.49E+1 | 2.17E+3 | 1.18E+1  | 7.54E+1  | 6.65E-1  | -1.17E+3 | 1.08E+3 |
| PENRM                | MJ           | 0       | 0        | 0       | 0       | 0        | 0        | 0        | 0        | 0       |
| PENRT                | MJ           | 2.09E+3 | 6.69E+1  | 1.49E+1 | 2.17E+3 | 1.18E+1  | 7.54E+1  | 6.65E-1  | -1.17E+3 | 1.08E+3 |
| PET                  | MJ           | 2.12E+3 | 6.74E+1  | 1.04E+2 | 2.29E+3 | 1.20E+1  | 7.89E+1  | 6.90E-1  | -1.19E+3 | 1.19E+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           | 6.78E-1 | 4.79E-3  | 2.15E-1 | 8.98E-1 | 1.26E-3  | 4.09E-2  | 7.74E-4  | -3.23E-1 | 6.18E-1 |

| Output flows and waste categories | Unit | A1      | A2      | A3      | A1-A3   | C2      | C3      | C4      | D        | Total   |
|-----------------------------------|------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| HWD                               | kg   | 2.87E-4 | 9.27E-5 | 2.14E-5 | 4.01E-4 | 2.85E-5 | 1.15E-4 | 7.55E-7 | -3.18E-4 | 2.27E-4 |
| NHWD                              | kg   | 2.18E+0 | 1.47E+0 | 6.56E-2 | 3.72E+0 | 6.91E-1 | 3.48E+0 | 2.76E+0 | -8.86E-1 | 9.76E+0 |
| RWD                               | kg   | 1.18E-3 | 4.30E-4 | 5.95E-5 | 1.67E-3 | 7.58E-5 | 2.70E-4 | 4.10E-6 | -6.08E-4 | 1.41E-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       |



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