Environmental Profile

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

Ecochain v3.5.64

Product:	3065019 - PE Pipe Cable BK/YL 110 L=100 SRE-P
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

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	6.13E+2	5.21E+1	2.25E+1	6.88E+2	8.03E+0	2.68E+2	4.44E+0	-4.03E+2	5.66E+2
GWP-f	kg CO2 eq	6.17E+2	5.20E+1	1.63E+1	6.85E+2	8.02E+0	2.62E+2	4.44E+0	-4.01E+2	5.58E+2
GWP-b	kg CO2 eq	-3.31E+0	-3.51E-3	4.29E+0	9.68E-1	4.87E-3	6.21E+0	3.34E-3	-1.52E+0	5.67E+0
GWP-luluc	kg CO2 eq	1.96E-1	3.08E-2	1.89E+0	2.12E+0	2.84E-3	4.51E-2	6.38E-5	-9.21E-2	2.08E+0
ODP	kg CFC11 eq	1.61E-5	1.08E-5	1.85E-6	2.87E-5	1.85E-6	5.87E-6	9.48E-8	-1.93E-5	1.72E-5
AP	mol H+ eq	2.24E+0	1.26E+0	1.38E-1	3.64E+0	4.57E-2	2.47E-1	2.26E-3	-1.11E+0	2.83E+0
EP-fw	kg P eq	1.06E-2	3.09E-4	3.01E-4	1.12E-2	6.60E-5	1.30E-3	2.94E-6	-5.00E-3	7.60E-3
EP-m	kg N eq	3.84E-1	3.21E-1	4.09E-2	7.45E-1	1.63E-2	7.20E-2	1.60E-3	-2.04E-1	6.31E-1
EP-T	mol N eq	4.33E+0	3.56E+0	4.49E-1	8.35E+0	1.80E-1	7.93E-1	9.18E-3	-2.27E+0	7.06E+0
POCP	kg NMVOC eq	2.07E+0	9.32E-1	1.25E-1	3.12E+0	5.15E-2	2.50E-1	3.60E-3	-1.06E+0	2.37E+0
ADP-mm	kg Sb eq	7.84E-3	6.74E-4	4.90E-4	9.00E-3	2.07E-4	9.76E-4	2.27E-6	-2.59E-3	7.60E-3
ADP-f	MJ	2.16E+4	7.02E+2	1.62E+2	2.25E+4	1.23E+2	7.82E+2	6.92E+0	-1.20E+4	1.14E+4
WDP	m3 depriv.	4.92E+2	1.54E+0	1.04E+2	5.98E+2	3.78E-1	1.54E+1	3.20E-2	-2.34E+2	3.80E+2
PM	disease inc.	1.89E-5	2.55E-6	2.33E-6	2.38E-5	7.24E-7	4.06E-6	4.76E-8	-8.83E-6	1.98E-5
IR	kBq U-235 eq	1.46E+1	2.99E+0	4.81E-1	1.81E+1	5.38E-1	2.36E+0	3.23E-2	-7.26E+0	1.37E+1
ETP-fw	CTUe	3.60E+3	5.12E+2	4.51E+2	4.56E+3	1.00E+2	8.88E+2	6.10E+0	-1.77E+3	3.78E+3
HTP-c	CTUh	1.77E-7	2.74E-8	1.78E-8	2.22E-7	3.56E-9	1.06E-7	1.68E-10	-8.35E-8	2.48E-7
HTP-nc	CTUh	3.95E-6	4.72E-7	4.86E-7	4.91E-6	1.19E-7	1.33E-6	3.88E-9	-1.87E-6	4.50E-6
SQP	Pt	1.43E+3	2.72E+2	2.13E+1	1.72E+3	1.05E+2	6.25E+2	1.78E+1	-5.08E+2	1.96E+3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.55E+2	6.13E+0	1.02E+3	1.48E+3	1.77E+0	3.86E+1	2.74E-1	-1.99E+2	1.32E+3
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.55E+2	6.13E+0	1.02E+3	1.48E+3	1.77E+0	3.86E+1	2.74E-1	-1.99E+2	1.32E+3
PENRE	MJ	2.32E+4	7.45E+2	1.72E+2	2.41E+4	1.31E+2	8.33E+2	7.34E+0	-1.30E+4	1.21E+4
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.32E+4	7.45E+2	1.72E+2	2.41E+4	1.31E+2	8.33E+2	7.34E+0	-1.30E+4	1.21E+4
PET	MJ	2.37E+4	7.52E+2	1.19E+3	2.56E+4	1.32E+2	8.72E+2	7.62E+0	-1.32E+4	1.34E+4
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	7.45E+0	5.34E-2	2.48E+0	9.98E+0	1.39E-2	4.52E-1	8.55E-3	-3.57E+0	6.89E+0

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.11E-3	1.03E-3	2.46E-4	4.39E-3	3.15E-4	1.27E-3	8.31E-6	-3.54E-3	2.44E-3
NHWD	kg	2.36E+1	1.64E+1	7.55E-1	4.08E+1	7.63E+0	3.85E+1	3.05E+1	-9.85E+0	1.08E+2
RWD	kg	1.31E-2	4.79E-3	6.85E-4	1.85E-2	8.37E-4	2.99E-3	4.53E-5	-6.75E-3	1.57E-2
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 Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
https://www.ecochain.com
+31 20 3035 777