

Environmental Profile

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

Ecochain v3.5.64



Product: 3064058 - PE80 Pipe BK/BR 90x5,4 PN8 SDR17 L=6
 Unit: 1 piece
 Manufacturer: Wavin - SE - Eskilstuna

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



For the safe transport of waste water from, for example, the household-property to the main pipe. The PE80 material is slightly more flexible than PE100 and is therefore excellent for rolled products.

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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.82E+1	1.63E+0	6.13E-1	2.04E+1	2.28E-1	8.24E+0	1.26E-1	-1.18E+1	1.72E+1
GWP-f	kg CO2 eq	1.84E+1	1.63E+0	4.45E-1	2.05E+1	2.28E-1	7.95E+0	1.26E-1	-1.18E+1	1.70E+1
GWP-b	kg CO2 eq	-2.15E-1	7.41E-4	1.17E-1	-9.75E-2	1.39E-4	2.82E-1	9.49E-5	-4.30E-2	1.42E-1
GWP-luluc	kg CO2 eq	6.25E-3	6.02E-4	5.17E-2	5.85E-2	8.08E-5	1.29E-3	1.81E-6	-2.62E-3	5.73E-2
ODP	kg CFC11 eq	1.01E-6	3.60E-7	5.04E-8	1.42E-6	5.26E-8	1.69E-7	2.70E-9	-5.83E-7	1.06E-6
AP	mol H+ eq	7.01E-2	9.93E-3	3.77E-3	8.38E-2	1.30E-3	7.15E-3	6.43E-5	-3.22E-2	6.01E-2
EP-fw	kg P eq	3.28E-4	1.63E-5	8.21E-6	3.53E-4	1.88E-6	3.72E-5	8.35E-8	-1.45E-4	2.47E-4
EP-m	kg N eq	1.18E-2	3.44E-3	1.12E-3	1.64E-2	4.65E-4	2.10E-3	4.55E-5	-5.93E-3	1.30E-2
EP-T	mol N eq	1.33E-1	3.79E-2	1.22E-2	1.83E-1	5.12E-3	2.31E-2	2.61E-4	-6.61E-2	1.46E-1
POCP	kg NMVOC eq	6.20E-2	1.08E-2	3.40E-3	7.62E-2	1.47E-3	7.27E-3	1.02E-4	-3.06E-2	5.44E-2
ADP-mm	kg Sb eq	2.28E-4	4.10E-5	1.34E-5	2.82E-4	5.90E-6	2.80E-5	6.46E-8	-7.40E-5	2.42E-4
ADP-f	MJ	6.39E+2	2.45E+1	4.42E+0	6.68E+2	3.50E+0	2.24E+1	1.97E-1	-3.48E+2	3.46E+2
WDP	m3 depriv.	1.37E+1	8.73E-2	2.85E+0	1.67E+1	1.07E-2	4.39E-1	9.02E-4	-6.68E+0	1.04E+1
PM	disease inc.	6.77E-7	1.45E-7	6.35E-8	8.86E-7	2.06E-8	1.17E-7	1.35E-9	-2.56E-7	7.69E-7
IR	kBq U-235 eq	5.72E-1	1.03E-1	1.31E-2	6.88E-1	1.53E-2	6.77E-2	9.18E-4	-2.08E-1	5.64E-1
ETP-fw	CTUe	1.31E+2	2.18E+1	1.23E+1	1.65E+2	2.84E+0	2.56E+1	1.74E-1	-5.28E+1	1.41E+2
HTP-c	CTUh	6.09E-9	7.13E-10	4.86E-10	7.29E-9	1.01E-10	3.08E-9	4.78E-12	-2.41E-9	8.06E-9
HTP-nc	CTUh	1.30E-7	2.38E-8	1.33E-8	1.67E-7	3.39E-9	3.86E-8	1.10E-10	-4.54E-8	1.64E-7
SQP	Pt	5.65E+1	2.11E+1	5.81E-1	7.82E+1	3.00E+0	1.79E+1	5.05E-1	-1.67E+1	8.29E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.50E+1	3.06E-1	2.79E+1	4.32E+1	5.02E-2	1.10E+0	7.79E-3	-6.10E+0	3.82E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.50E+1	3.06E-1	2.79E+1	4.32E+1	5.02E-2	1.10E+0	7.79E-3	-6.10E+0	3.82E+1
PENRE	MJ	6.85E+2	2.61E+1	4.69E+0	7.16E+2	3.72E+0	2.39E+1	2.09E-1	-3.76E+2	3.68E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.85E+2	2.61E+1	4.69E+0	7.16E+2	3.72E+0	2.39E+1	2.09E-1	-3.76E+2	3.68E+2
PET	MJ	7.00E+2	2.64E+1	3.26E+1	7.59E+2	3.77E+0	2.50E+1	2.17E-1	-3.82E+2	4.06E+2
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	2.13E-1	2.97E-3	6.76E-2	2.84E-1	3.96E-4	1.30E-2	2.43E-4	-1.02E-1	1.95E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.14E-4	6.18E-5	6.73E-6	1.82E-4	8.96E-6	3.67E-5	2.36E-7	-1.12E-4	1.16E-4
NHWD	kg	7.75E-1	1.54E+0	2.06E-2	2.34E+0	2.17E-1	1.13E+0	8.68E-1	-2.88E-1	4.26E+0
RWD	kg	6.16E-4	1.61E-4	1.87E-5	7.96E-4	2.38E-5	8.58E-5	1.29E-6	-1.94E-4	7.12E-4
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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