

Environmental Profile

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

Ecochain v3.5.64



Product: 3064057 - PE80 Pipe BK/BR 90x5,4 PN8 SDR17 L=50
 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	1.43E+2	1.36E+1	5.11E+0	1.62E+2	1.90E+0	6.67E+1	1.05E+0	-9.57E+1	1.36E+2
GWP-f	kg CO2 eq	1.47E+2	1.35E+1	3.70E+0	1.64E+2	1.90E+0	6.24E+1	1.05E+0	-9.54E+1	1.34E+2
GWP-b	kg CO2 eq	-3.66E+0	6.15E-3	9.74E-1	-2.68E+0	1.15E-3	4.29E+0	7.90E-4	-3.60E-1	1.25E+0
GWP-luluc	kg CO2 eq	4.73E-2	5.00E-3	4.30E-1	4.83E-1	6.72E-4	1.07E-2	1.51E-5	-2.23E-2	4.72E-1
ODP	kg CFC11 eq	8.07E-6	2.99E-6	4.19E-7	1.15E-5	4.38E-7	1.40E-6	2.25E-8	-4.61E-6	8.72E-6
AP	mol H+ eq	5.55E-1	8.25E-2	3.14E-2	6.69E-1	1.08E-2	5.89E-2	5.36E-4	-2.65E-1	4.74E-1
EP-fw	kg P eq	2.48E-3	1.36E-4	6.83E-5	2.69E-3	1.56E-5	3.08E-4	6.96E-7	-1.19E-3	1.82E-3
EP-m	kg N eq	9.32E-2	2.86E-2	9.29E-3	1.31E-1	3.87E-3	1.72E-2	3.79E-4	-4.87E-2	1.04E-1
EP-T	mol N eq	1.05E+0	3.15E-1	1.02E-1	1.47E+0	4.27E-2	1.89E-1	2.18E-3	-5.45E-1	1.16E+0
POCP	kg NMVOC eq	4.92E-1	8.97E-2	2.83E-2	6.10E-1	1.22E-2	5.98E-2	8.53E-4	-2.51E-1	4.32E-1
ADP-mm	kg Sb eq	1.84E-3	3.41E-4	1.11E-4	2.30E-3	4.91E-5	2.32E-4	5.38E-7	-6.15E-4	1.96E-3
ADP-f	MJ	5.17E+3	2.04E+2	3.68E+1	5.41E+3	2.92E+1	1.86E+2	1.64E+0	-2.86E+3	2.77E+3
WDP	m3 depriv.	1.12E+2	7.26E-1	2.37E+1	1.36E+2	8.95E-2	3.64E+0	7.51E-3	-5.54E+1	8.43E+1
PM	disease inc.	5.46E-6	1.21E-6	5.29E-7	7.20E-6	1.71E-7	9.66E-7	1.13E-8	-2.12E-6	6.23E-6
IR	kBq U-235 eq	4.52E+0	8.55E-1	1.09E-1	5.48E+0	1.27E-1	5.60E-1	7.64E-3	-1.73E+0	4.45E+0
ETP-fw	CTUe	9.85E+2	1.81E+2	1.03E+2	1.27E+3	2.37E+1	2.11E+2	1.45E+0	-4.32E+2	1.07E+3
HTP-c	CTUh	4.26E-8	5.92E-9	4.05E-9	5.26E-8	8.43E-10	2.53E-8	3.98E-11	-2.00E-8	5.88E-8
HTP-nc	CTUh	9.60E-7	1.98E-7	1.10E-7	1.27E-6	2.82E-8	3.17E-7	9.19E-10	-4.48E-7	1.17E-6
SQP	Pt	6.23E+2	1.76E+2	4.84E+0	8.03E+2	2.49E+1	1.48E+2	4.21E+0	-1.75E+2	8.06E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.44E+2	2.54E+0	2.32E+2	3.78E+2	4.18E-1	9.15E+0	6.49E-2	-5.83E+1	3.30E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.44E+2	2.54E+0	2.32E+2	3.78E+2	4.18E-1	9.15E+0	6.49E-2	-5.83E+1	3.30E+2
PENRE	MJ	5.54E+3	2.17E+2	3.91E+1	5.80E+3	3.10E+1	1.98E+2	1.74E+0	-3.08E+3	2.95E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.54E+3	2.17E+2	3.91E+1	5.80E+3	3.10E+1	1.98E+2	1.74E+0	-3.08E+3	2.95E+3
PET	MJ	5.69E+3	2.19E+2	2.71E+2	6.18E+3	3.14E+1	2.07E+2	1.80E+0	-3.14E+3	3.28E+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	1.70E+0	2.47E-2	5.63E-1	2.29E+0	3.30E-3	1.08E-1	2.03E-3	-8.47E-1	1.55E+0

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.23E-4	5.14E-4	5.60E-5	1.39E-3	7.46E-5	3.03E-4	1.97E-6	-8.47E-4	9.25E-4
NHWD	kg	5.78E+0	1.28E+1	1.72E-1	1.88E+1	1.81E+0	9.21E+0	7.22E+0	-2.36E+0	3.47E+1
RWD	kg	4.92E-3	1.34E-3	1.56E-4	6.41E-3	1.98E-4	7.09E-4	1.07E-5	-1.61E-3	5.73E-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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