

Environmental Profile

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

Ecochain v3.5.64



Product: 3064044 - PE80 Pipe BK/BR 75x4,5 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	1.31E+1	1.13E+0	4.27E-1	1.46E+1	1.59E-1	5.68E+0	8.79E-2	-8.33E+0	1.22E+1
GWP-f	kg CO2 eq	1.30E+1	1.13E+0	3.09E-1	1.44E+1	1.59E-1	5.69E+0	8.80E-2	-8.30E+0	1.21E+1
GWP-b	kg CO2 eq	4.99E-2	5.15E-4	8.14E-2	1.32E-1	9.64E-5	-6.39E-3	6.60E-5	-2.99E-2	9.56E-2
GWP-luluc	kg CO2 eq	4.43E-3	4.19E-4	3.60E-2	4.08E-2	5.62E-5	8.97E-4	1.26E-6	-1.80E-3	4.00E-2
ODP	kg CFC11 eq	7.07E-7	2.50E-7	3.50E-8	9.92E-7	3.66E-8	1.18E-7	1.88E-9	-4.15E-7	7.34E-7
AP	mol H+ eq	4.96E-2	6.91E-3	2.62E-3	5.91E-2	9.04E-4	4.98E-3	4.48E-5	-2.24E-2	4.27E-2
EP-fw	kg P eq	2.35E-4	1.14E-5	5.71E-6	2.52E-4	1.31E-6	2.59E-5	5.81E-8	-1.01E-4	1.79E-4
EP-m	kg N eq	8.32E-3	2.39E-3	7.76E-4	1.15E-2	3.23E-4	1.46E-3	3.17E-5	-4.12E-3	9.19E-3
EP-T	mol N eq	9.38E-2	2.64E-2	8.52E-3	1.29E-1	3.56E-3	1.61E-2	1.82E-4	-4.58E-2	1.03E-1
POCP	kg NMVOC eq	4.38E-2	7.50E-3	2.37E-3	5.36E-2	1.02E-3	5.06E-3	7.12E-5	-2.13E-2	3.85E-2
ADP-mm	kg Sb eq	1.60E-4	2.85E-5	9.31E-6	1.98E-4	4.11E-6	1.95E-5	4.49E-8	-5.15E-5	1.70E-4
ADP-f	MJ	4.50E+2	1.71E+1	3.07E+0	4.70E+2	2.44E+0	1.56E+1	1.37E-1	-2.44E+2	2.44E+2
WDP	m3 depriv.	9.66E+0	6.07E-2	1.98E+0	1.17E+1	7.48E-3	3.06E-1	6.27E-4	-4.66E+0	7.36E+0
PM	disease inc.	4.69E-7	1.01E-7	4.42E-8	6.14E-7	1.43E-8	8.14E-8	9.41E-10	-1.77E-7	5.34E-7
IR	kBq U-235 eq	4.04E-1	7.16E-2	9.14E-3	4.84E-1	1.06E-2	4.71E-2	6.38E-4	-1.45E-1	3.98E-1
ETP-fw	CTUe	9.35E+1	1.52E+1	8.57E+0	1.17E+2	1.98E+0	1.78E+1	1.21E-1	-3.61E+1	1.01E+2
HTP-c	CTUh	4.24E-9	4.96E-10	3.38E-10	5.07E-9	7.04E-11	2.15E-9	3.33E-12	-1.67E-9	5.62E-9
HTP-nc	CTUh	9.18E-8	1.66E-8	9.22E-9	1.18E-7	2.36E-9	2.70E-8	7.68E-11	-3.12E-8	1.16E-7
SQP	Pt	2.17E+1	1.47E+1	4.04E-1	3.68E+1	2.08E+0	1.25E+1	3.51E-1	-7.76E+0	4.39E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.93E+0	2.13E-1	1.94E+1	2.75E+1	3.49E-2	7.69E-1	5.42E-3	-3.46E+0	2.49E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.93E+0	2.13E-1	1.94E+1	2.75E+1	3.49E-2	7.69E-1	5.42E-3	-3.46E+0	2.49E+1
PENRE	MJ	4.82E+2	1.81E+1	3.26E+0	5.04E+2	2.59E+0	1.66E+1	1.45E-1	-2.63E+2	2.60E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.82E+2	1.81E+1	3.26E+0	5.04E+2	2.59E+0	1.66E+1	1.45E-1	-2.63E+2	2.60E+2
PET	MJ	4.90E+2	1.83E+1	2.26E+1	5.31E+2	2.62E+0	1.74E+1	1.51E-1	-2.67E+2	2.85E+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	1.51E-1	2.07E-3	4.70E-2	2.00E-1	2.76E-4	9.07E-3	1.69E-4	-7.13E-2	1.38E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.14E-5	4.30E-5	4.68E-6	1.29E-4	6.23E-6	2.56E-5	1.64E-7	-8.01E-5	8.10E-5
NHWD	kg	5.48E-1	1.07E+0	1.43E-2	1.64E+0	1.51E-1	7.89E-1	6.04E-1	-1.99E-1	2.98E+0
RWD	kg	4.33E-4	1.12E-4	1.30E-5	5.58E-4	1.66E-5	5.97E-5	8.96E-7	-1.36E-4	5.00E-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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