

Environmental Profile

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

Ecochain v3.5.64



Product: 3064029 - PE80 Pipe BK/BR 63 PN8 SDR17 L=200
 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 non-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	2.86E+2	2.69E+1	1.01E+1	3.23E+2	3.77E+0	1.29E+2	2.09E+0	-1.90E+2	2.68E+2
GWP-f	kg CO2 eq	2.90E+2	2.69E+1	7.35E+0	3.24E+2	3.77E+0	1.23E+2	2.09E+0	-1.89E+2	2.64E+2
GWP-b	kg CO2 eq	-4.11E+0	1.22E-2	1.93E+0	-2.16E+0	2.29E-3	5.37E+0	1.57E-3	-7.15E-1	2.50E+0
GWP-luluc	kg CO2 eq	9.14E-2	9.92E-3	8.54E-1	9.56E-1	1.33E-3	2.12E-2	3.00E-5	-4.37E-2	9.35E-1
ODP	kg CFC11 eq	1.59E-5	5.92E-6	8.32E-7	2.27E-5	8.69E-7	2.77E-6	4.46E-8	-9.10E-6	1.72E-5
AP	mol H+ eq	1.09E+0	1.64E-1	6.22E-2	1.32E+0	2.15E-2	1.17E-1	1.06E-3	-5.25E-1	9.34E-1
EP-fw	kg P eq	4.87E-3	2.69E-4	1.36E-4	5.28E-3	3.10E-5	6.12E-4	1.38E-6	-2.36E-3	3.56E-3
EP-m	kg N eq	1.83E-1	5.67E-2	1.84E-2	2.59E-1	7.68E-3	3.40E-2	7.52E-4	-9.62E-2	2.05E-1
EP-T	mol N eq	2.07E+0	6.25E-1	2.02E-1	2.90E+0	8.47E-2	3.74E-1	4.32E-3	-1.07E+0	2.29E+0
POCP	kg NMVOC eq	9.71E-1	1.78E-1	5.62E-2	1.20E+0	2.42E-2	1.18E-1	1.69E-3	-4.97E-1	8.51E-1
ADP-mm	kg Sb eq	3.64E-3	6.75E-4	2.21E-4	4.54E-3	9.75E-5	4.59E-4	1.07E-6	-1.22E-3	3.88E-3
ADP-f	MJ	1.02E+4	4.05E+2	7.30E+1	1.07E+4	5.79E+1	3.68E+2	3.25E+0	-5.66E+3	5.47E+3
WDP	m3 depriv.	2.21E+2	1.44E+0	4.70E+1	2.69E+2	1.78E-1	7.23E+0	1.49E-2	-1.10E+2	1.67E+2
PM	disease inc.	1.07E-5	2.40E-6	1.05E-6	1.41E-5	3.40E-7	1.91E-6	2.24E-8	-4.17E-6	1.22E-5
IR	kBq U-235 eq	8.90E+0	1.70E+0	2.17E-1	1.08E+1	2.53E-1	1.11E+0	1.52E-2	-3.42E+0	8.77E+0
ETP-fw	CTUe	1.93E+3	3.60E+2	2.04E+2	2.49E+3	4.70E+1	4.18E+2	2.87E+0	-8.44E+2	2.11E+3
HTP-c	CTUh	8.32E-8	1.17E-8	8.04E-9	1.03E-7	1.67E-9	4.99E-8	7.90E-11	-3.94E-8	1.15E-7
HTP-nc	CTUh	1.88E-6	3.93E-7	2.19E-7	2.50E-6	5.60E-8	6.28E-7	1.82E-9	-8.84E-7	2.30E-6
SQP	Pt	9.47E+2	3.48E+2	9.60E+0	1.31E+3	4.95E+1	2.94E+2	8.35E+0	-2.87E+2	1.37E+3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.42E+2	5.04E+0	4.60E+2	7.07E+2	8.30E-1	1.81E+1	1.29E-1	-1.03E+2	6.23E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.42E+2	5.04E+0	4.60E+2	7.07E+2	8.30E-1	1.81E+1	1.29E-1	-1.03E+2	6.23E+2
PENRE	MJ	1.10E+4	4.30E+2	7.75E+1	1.15E+4	6.14E+1	3.92E+2	3.45E+0	-6.11E+3	5.83E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.10E+4	4.30E+2	7.75E+1	1.15E+4	6.14E+1	3.92E+2	3.45E+0	-6.11E+3	5.83E+3
PET	MJ	1.12E+4	4.35E+2	5.38E+2	1.22E+4	6.23E+1	4.10E+2	3.58E+0	-6.21E+3	6.45E+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	3.36E+0	4.90E-2	1.12E+0	4.52E+0	6.55E-3	2.13E-1	4.02E-3	-1.68E+0	3.07E+0

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.60E-3	1.02E-3	1.11E-4	2.73E-3	1.48E-4	6.00E-4	3.91E-6	-1.67E-3	1.81E-3
NHWD	kg	1.13E+1	2.54E+1	3.41E-1	3.70E+1	3.59E+0	1.82E+1	1.43E+1	-4.65E+0	6.85E+1
RWD	kg	9.70E-3	2.66E-3	3.09E-4	1.27E-2	3.94E-4	1.41E-3	2.13E-5	-3.18E-3	1.13E-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



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