

Environmental Profile

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

Ecochain v3.5.64



Product: 3063968 - PE80 Pipe BK/BL 25 SDR11 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	1.74E+1	1.58E+0	5.99E-1	1.96E+1	2.21E-1	7.48E+0	1.23E-1	-1.12E+1	1.62E+1
GWP-f	kg CO2 eq	1.74E+1	1.58E+0	4.34E-1	1.94E+1	2.21E-1	7.48E+0	1.23E-1	-1.12E+1	1.60E+1
GWP-b	kg CO2 eq	7.89E-2	7.16E-4	1.14E-1	1.94E-1	1.34E-4	-8.84E-3	9.20E-5	-4.20E-2	1.43E-1
GWP-luluc	kg CO2 eq	5.24E-3	5.82E-4	5.04E-2	5.63E-2	7.83E-5	1.24E-3	1.76E-6	-2.52E-3	5.51E-2
ODP	kg CFC11 eq	9.29E-7	3.47E-7	4.91E-8	1.33E-6	5.10E-8	1.62E-7	2.61E-9	-5.43E-7	9.98E-7
AP	mol H+ eq	6.53E-2	9.60E-3	3.68E-3	7.86E-2	1.26E-3	6.84E-3	6.24E-5	-3.07E-2	5.60E-2
EP-fw	kg P eq	2.85E-4	1.58E-5	8.01E-6	3.09E-4	1.82E-6	3.59E-5	8.10E-8	-1.38E-4	2.09E-4
EP-m	kg N eq	1.09E-2	3.32E-3	1.09E-3	1.53E-2	4.51E-4	2.00E-3	4.41E-5	-5.63E-3	1.22E-2
EP-T	mol N eq	1.23E-1	3.67E-2	1.20E-2	1.71E-1	4.97E-3	2.20E-2	2.53E-4	-6.26E-2	1.36E-1
POCP	kg NMVOC eq	5.76E-2	1.04E-2	3.32E-3	7.14E-2	1.42E-3	6.94E-3	9.93E-5	-2.92E-2	5.07E-2
ADP-mm	kg Sb eq	2.13E-4	3.96E-5	1.31E-5	2.66E-4	5.72E-6	2.70E-5	6.26E-8	-7.15E-5	2.27E-4
ADP-f	MJ	6.07E+2	2.37E+1	4.31E+0	6.35E+2	3.39E+0	2.16E+1	1.91E-1	-3.34E+2	3.27E+2
WDP	m3 depriv.	1.32E+1	8.44E-2	2.78E+0	1.61E+1	1.04E-2	4.24E-1	8.74E-4	-6.45E+0	1.01E+1
PM	disease inc.	6.22E-7	1.40E-7	6.20E-8	8.25E-7	2.00E-8	1.12E-7	1.31E-9	-2.43E-7	7.16E-7
IR	kBq U-235 eq	5.21E-1	9.94E-2	1.28E-2	6.33E-1	1.48E-2	6.51E-2	8.89E-4	-2.01E-1	5.14E-1
ETP-fw	CTUe	1.14E+2	2.11E+1	1.20E+1	1.47E+2	2.76E+0	2.47E+1	1.68E-1	-4.83E+1	1.26E+2
HTP-c	CTUh	4.84E-9	6.89E-10	4.75E-10	6.00E-9	9.81E-11	2.94E-9	4.63E-12	-2.30E-9	6.74E-9
HTP-nc	CTUh	1.10E-7	2.30E-8	1.29E-8	1.46E-7	3.29E-9	3.70E-8	1.07E-10	-5.14E-8	1.36E-7
SQP	Pt	2.70E+1	2.04E+1	5.67E-1	4.80E+1	2.90E+0	1.73E+1	4.90E-1	-1.06E+1	5.81E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.95E+0	2.96E-1	2.72E+1	3.74E+1	4.87E-2	1.07E+0	7.55E-3	-4.80E+0	3.38E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.95E+0	2.96E-1	2.72E+1	3.74E+1	4.87E-2	1.07E+0	7.55E-3	-4.80E+0	3.38E+1
PENRE	MJ	6.51E+2	2.52E+1	4.58E+0	6.81E+2	3.60E+0	2.30E+1	2.02E-1	-3.60E+2	3.48E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.51E+2	2.52E+1	4.58E+0	6.81E+2	3.60E+0	2.30E+1	2.02E-1	-3.60E+2	3.48E+2
PET	MJ	6.61E+2	2.55E+1	3.18E+1	7.19E+2	3.65E+0	2.41E+1	2.10E-1	-3.65E+2	3.81E+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	2.03E-1	2.87E-3	6.60E-2	2.72E-1	3.84E-4	1.25E-2	2.36E-4	-9.87E-2	1.86E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.15E-5	5.98E-5	6.57E-6	1.58E-4	8.68E-6	3.53E-5	2.29E-7	-9.98E-5	1.02E-4
NHWD	kg	6.58E-1	1.49E+0	2.01E-2	2.17E+0	2.10E-1	1.07E+0	8.41E-1	-2.71E-1	4.02E+0
RWD	kg	5.67E-4	1.56E-4	1.82E-5	7.41E-4	2.31E-5	8.25E-5	1.25E-6	-1.87E-4	6.61E-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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