

Environmental Profile

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

Ecochain v3.5.64



Product: 3064028 - PE80 Pipe BK/RD 63 SDR17 L=100
 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	1.17E+2	1.34E+1	5.02E+0	1.35E+2	1.87E+0	9.59E+1	1.04E+0	-9.51E+1	1.39E+2
GWP-f	kg CO2 eq	1.50E+2	1.34E+1	3.64E+0	1.67E+2	1.87E+0	6.23E+1	1.04E+0	-9.47E+1	1.38E+2
GWP-b	kg CO2 eq	-3.30E+1	6.10E-3	9.58E-1	-3.21E+1	1.14E-3	3.36E+1	7.78E-4	-3.55E-1	1.19E+0
GWP-luluc	kg CO2 eq	6.47E-2	4.96E-3	4.24E-1	4.93E-1	6.62E-4	1.06E-2	1.49E-5	-2.61E-2	4.78E-1
ODP	kg CFC11 eq	8.60E-6	2.96E-6	4.13E-7	1.20E-5	4.31E-7	1.41E-6	2.21E-8	-4.69E-6	9.15E-6
AP	mol H+ eq	5.86E-1	8.18E-2	3.09E-2	6.99E-1	1.07E-2	6.09E-2	5.27E-4	-2.75E-1	4.96E-1
EP-fw	kg P eq	2.70E-3	1.35E-4	6.72E-5	2.90E-3	1.54E-5	3.07E-4	6.85E-7	-1.22E-3	2.01E-3
EP-m	kg N eq	1.02E-1	2.83E-2	9.14E-3	1.40E-1	3.81E-3	1.82E-2	3.73E-4	-5.20E-2	1.10E-1
EP-T	mol N eq	1.17E+0	3.13E-1	1.00E-1	1.58E+0	4.20E-2	2.01E-1	2.14E-3	-6.00E-1	1.23E+0
POCP	kg NMVOC eq	5.20E-1	8.89E-2	2.79E-2	6.37E-1	1.20E-2	6.27E-2	8.39E-4	-2.59E-1	4.53E-1
ADP-mm	kg Sb eq	1.91E-3	3.38E-4	1.10E-4	2.36E-3	4.84E-5	2.32E-4	5.29E-7	-6.14E-4	2.02E-3
ADP-f	MJ	5.18E+3	2.02E+2	3.62E+1	5.42E+3	2.87E+1	1.86E+2	1.61E+0	-2.82E+3	2.81E+3
WDP	m3 depriv.	1.13E+2	7.20E-1	2.33E+1	1.37E+2	8.81E-2	3.62E+0	7.39E-3	-5.47E+1	8.57E+1
PM	disease inc.	6.94E-6	1.20E-6	5.21E-7	8.66E-6	1.69E-7	9.80E-7	1.11E-8	-2.32E-6	7.51E-6
IR	kBq U-235 eq	4.78E+0	8.48E-1	1.08E-1	5.74E+0	1.25E-1	5.63E-1	7.52E-3	-1.73E+0	4.70E+0
ETP-fw	CTUe	1.12E+3	1.80E+2	1.01E+2	1.41E+3	2.33E+1	2.11E+2	1.42E+0	-5.46E+2	1.10E+3
HTP-c	CTUh	5.38E-8	5.87E-9	3.99E-9	6.36E-8	8.29E-10	2.70E-8	3.92E-11	-2.15E-8	7.00E-8
HTP-nc	CTUh	1.07E-6	1.96E-7	1.09E-7	1.38E-6	2.78E-8	3.21E-7	9.04E-10	-4.94E-7	1.23E-6
SQP	Pt	3.29E+3	1.74E+2	4.76E+0	3.47E+3	2.46E+1	1.48E+2	4.14E+0	-7.43E+2	2.90E+3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.44E+2	2.52E+0	2.28E+2	7.74E+2	4.12E-1	9.09E+0	6.39E-2	-1.72E+2	6.12E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.44E+2	2.52E+0	2.28E+2	7.74E+2	4.12E-1	9.09E+0	6.39E-2	-1.72E+2	6.12E+2
PENRE	MJ	5.55E+3	2.15E+2	3.84E+1	5.81E+3	3.05E+1	1.98E+2	1.71E+0	-3.05E+3	2.99E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.55E+3	2.15E+2	3.84E+1	5.81E+3	3.05E+1	1.98E+2	1.71E+0	-3.05E+3	2.99E+3
PET	MJ	6.10E+3	2.17E+2	2.67E+2	6.58E+3	3.09E+1	2.07E+2	1.78E+0	-3.22E+3	3.60E+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	1.76E+0	2.45E-2	5.54E-1	2.34E+0	3.25E-3	1.10E-1	1.99E-3	-8.39E-1	1.61E+0

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.03E-3	5.10E-4	5.51E-5	1.59E-3	7.34E-5	3.05E-4	1.94E-6	-8.62E-4	1.11E-3
NHWD	kg	7.12E+0	1.27E+1	1.69E-1	2.00E+1	1.78E+0	9.67E+0	7.11E+0	-2.57E+0	3.60E+1
RWD	kg	5.21E-3	1.33E-3	1.53E-4	6.69E-3	1.95E-4	7.15E-4	1.06E-5	-1.62E-3	5.99E-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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