

Environmental Profile

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

Ecochain v3.5.64



Product: 3064005 - PE80 Pipe BK/BL 40 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	4.46E+1	4.06E+0	1.52E+0	5.02E+1	5.70E-1	1.91E+1	3.16E-1	-2.88E+1	4.14E+1
GWP-f	kg CO2 eq	4.44E+1	4.06E+0	1.10E+0	4.96E+1	5.69E-1	1.91E+1	3.16E-1	-2.87E+1	4.09E+1
GWP-b	kg CO2 eq	2.06E-1	1.84E-3	2.89E-1	4.97E-1	3.46E-4	-2.27E-2	2.37E-4	-1.08E-1	3.67E-1
GWP-luluc	kg CO2 eq	1.34E-2	1.50E-3	1.28E-1	1.43E-1	2.02E-4	3.20E-3	4.53E-6	-6.49E-3	1.40E-1
ODP	kg CFC11 eq	2.39E-6	8.95E-7	1.24E-7	3.41E-6	1.31E-7	4.18E-7	6.73E-9	-1.39E-6	2.57E-6
AP	mol H+ eq	1.67E-1	2.47E-2	9.31E-3	2.01E-1	3.24E-3	1.76E-2	1.61E-4	-7.91E-2	1.43E-1
EP-fw	kg P eq	7.33E-4	4.06E-5	2.03E-5	7.94E-4	4.69E-6	9.24E-5	2.09E-7	-3.55E-4	5.36E-4
EP-m	kg N eq	2.79E-2	8.56E-3	2.76E-3	3.92E-2	1.16E-3	5.13E-3	1.14E-4	-1.45E-2	3.11E-2
EP-T	mol N eq	3.15E-1	9.44E-2	3.03E-2	4.39E-1	1.28E-2	5.65E-2	6.52E-4	-1.61E-1	3.48E-1
POCP	kg NMVOC eq	1.48E-1	2.68E-2	8.41E-3	1.83E-1	3.66E-3	1.78E-2	2.56E-4	-7.50E-2	1.30E-1
ADP-mm	kg Sb eq	5.47E-4	1.02E-4	3.31E-5	6.82E-4	1.47E-5	6.94E-5	1.61E-7	-1.84E-4	5.82E-4
ADP-f	MJ	1.56E+3	6.11E+1	1.09E+1	1.63E+3	8.74E+0	5.56E+1	4.91E-1	-8.58E+2	8.37E+2
WDP	m3 depriv.	3.38E+1	2.17E-1	7.04E+0	4.11E+1	2.68E-2	1.09E+0	2.25E-3	-1.66E+1	2.56E+1
PM	disease inc.	1.59E-6	3.62E-7	1.57E-7	2.11E-6	5.14E-8	2.89E-7	3.38E-9	-6.25E-7	1.83E-6
IR	kBq U-235 eq	1.34E+0	2.56E-1	3.25E-2	1.63E+0	3.82E-2	1.68E-1	2.29E-3	-5.16E-1	1.32E+0
ETP-fw	CTUe	2.91E+2	5.43E+1	3.04E+1	3.76E+2	7.10E+0	6.35E+1	4.33E-1	-1.24E+2	3.23E+2
HTP-c	CTUh	1.24E-8	1.77E-9	1.20E-9	1.54E-8	2.53E-10	7.56E-9	1.19E-11	-5.92E-9	1.73E-8
HTP-nc	CTUh	2.84E-7	5.93E-8	3.28E-8	3.76E-7	8.46E-9	9.52E-8	2.75E-10	-1.32E-7	3.47E-7
SQP	Pt	6.88E+1	5.26E+1	1.44E+0	1.23E+2	7.48E+0	4.44E+1	1.26E+0	-2.72E+1	1.49E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.55E+1	7.61E-1	6.89E+1	9.51E+1	1.25E-1	2.74E+0	1.95E-2	-1.24E+1	8.56E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.55E+1	7.61E-1	6.89E+1	9.51E+1	1.25E-1	2.74E+0	1.95E-2	-1.24E+1	8.56E+1
PENRE	MJ	1.67E+3	6.49E+1	1.16E+1	1.75E+3	9.28E+0	5.92E+1	5.21E-1	-9.26E+2	8.91E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.67E+3	6.49E+1	1.16E+1	1.75E+3	9.28E+0	5.92E+1	5.21E-1	-9.26E+2	8.91E+2
PET	MJ	1.70E+3	6.56E+1	8.05E+1	1.84E+3	9.41E+0	6.20E+1	5.41E-1	-9.39E+2	9.77E+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	5.19E-1	7.40E-3	1.67E-1	6.93E-1	9.89E-4	3.22E-2	6.08E-4	-2.54E-1	4.73E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.35E-4	1.54E-4	1.66E-5	4.06E-4	2.24E-5	9.07E-5	5.90E-7	-2.56E-4	2.64E-4
NHWD	kg	1.68E+0	3.84E+0	5.10E-2	5.57E+0	5.42E-1	2.75E+0	2.17E+0	-6.98E-1	1.03E+1
RWD	kg	1.46E-3	4.01E-4	4.62E-5	1.91E-3	5.94E-5	2.12E-4	3.21E-6	-4.80E-4	1.70E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777