

# Environmental Profile

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

Ecochain v3.5.64



Product: 3064066 - PE80 Pipe BK/BL 90x8,2 PN12,5 SDR11 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]

## Statement of Confidentiality

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# Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.64E+1	2.40E+0	9.02E-1	2.97E+1	3.36E-1	1.17E+1	1.86E-1	-1.72E+1	2.48E+1
GWP-f	kg CO2 eq	2.66E+1	2.39E+0	6.54E-1	2.96E+1	3.35E-1	1.14E+1	1.86E-1	-1.71E+1	2.45E+1
GWP-b	kg CO2 eq	-1.74E-1	1.09E-3	1.72E-1	-1.47E-3	2.04E-4	2.78E-1	1.40E-4	-6.33E-2	2.13E-1
GWP-luluc	kg CO2 eq	8.74E-3	8.84E-4	7.60E-2	8.56E-2	1.19E-4	1.89E-3	2.67E-6	-3.84E-3	8.38E-2
ODP	kg CFC11 eq	1.46E-6	5.28E-7	7.40E-8	2.06E-6	7.73E-8	2.48E-7	3.96E-9	-8.40E-7	1.55E-6
AP	mol H+ eq	1.01E-1	1.46E-2	5.54E-3	1.21E-1	1.91E-3	1.04E-2	9.46E-5	-4.70E-2	8.65E-2
EP-fw	kg P eq	4.65E-4	2.40E-5	1.21E-5	5.01E-4	2.76E-6	5.46E-5	1.23E-7	-2.12E-4	3.47E-4
EP-m	kg N eq	1.69E-2	5.05E-3	1.64E-3	2.36E-2	6.84E-4	3.05E-3	6.69E-5	-8.64E-3	1.88E-2
EP-T	mol N eq	1.91E-1	5.57E-2	1.80E-2	2.65E-1	7.53E-3	3.36E-2	3.84E-4	-9.63E-2	2.10E-1
POCP	kg NMVOC eq	8.93E-2	1.58E-2	5.00E-3	1.10E-1	2.15E-3	1.06E-2	1.51E-4	-4.47E-2	7.84E-2
ADP-mm	kg Sb eq	3.31E-4	6.02E-5	1.97E-5	4.11E-4	8.68E-6	4.11E-5	9.49E-8	-1.09E-4	3.52E-4
ADP-f	MJ	9.29E+2	3.60E+1	6.49E+0	9.71E+2	5.15E+0	3.29E+1	2.89E-1	-5.09E+2	5.01E+2
WDP	m3 depriv.	2.00E+1	1.28E-1	4.18E+0	2.43E+1	1.58E-2	6.44E-1	1.33E-3	-9.81E+0	1.52E+1
PM	disease inc.	9.71E-7	2.13E-7	9.34E-8	1.28E-6	3.03E-8	1.71E-7	1.99E-9	-3.73E-7	1.11E-6
IR	kBq U-235 eq	8.22E-1	1.51E-1	1.93E-2	9.93E-1	2.25E-2	9.91E-2	1.35E-3	-3.05E-1	8.11E-1
ETP-fw	CTUe	1.85E+2	3.20E+1	1.81E+1	2.35E+2	4.18E+0	3.74E+1	2.55E-1	-7.62E+1	2.01E+2
HTP-c	CTUh	8.38E-9	1.05E-9	7.15E-10	1.01E-8	1.49E-10	4.49E-9	7.03E-12	-3.52E-9	1.13E-8
HTP-nc	CTUh	1.83E-7	3.50E-8	1.95E-8	2.37E-7	4.98E-9	5.64E-8	1.62E-10	-7.03E-8	2.29E-7
SQP	Pt	6.91E+1	3.10E+1	8.54E-1	1.01E+2	4.40E+0	2.63E+1	7.43E-1	-2.18E+1	1.11E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.97E+1	4.49E-1	4.10E+1	6.11E+1	7.39E-2	1.62E+0	1.15E-2	-8.43E+0	5.44E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.97E+1	4.49E-1	4.10E+1	6.11E+1	7.39E-2	1.62E+0	1.15E-2	-8.43E+0	5.44E+1
PENRE	MJ	9.96E+2	3.83E+1	6.90E+0	1.04E+3	5.47E+0	3.50E+1	3.07E-1	-5.49E+2	5.33E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.96E+2	3.83E+1	6.90E+0	1.04E+3	5.47E+0	3.50E+1	3.07E-1	-5.49E+2	5.33E+2
PET	MJ	1.02E+3	3.87E+1	4.79E+1	1.10E+3	5.54E+0	3.66E+1	3.19E-1	-5.58E+2	5.87E+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	3.08E-1	4.36E-3	9.94E-2	4.12E-1	5.83E-4	1.91E-2	3.58E-4	-1.50E-1	2.82E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.58E-4	9.08E-5	9.89E-6	2.58E-4	1.32E-5	5.37E-5	3.47E-7	-1.60E-4	1.66E-4
NHWD	kg	1.09E+0	2.27E+0	3.03E-2	3.38E+0	3.19E-1	1.64E+0	1.28E+0	-4.19E-1	6.20E+0
RWD	kg	8.89E-4	2.37E-4	2.75E-5	1.15E-3	3.50E-5	1.26E-4	1.89E-6	-2.84E-4	1.03E-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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