

# Environmental Profile

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

Ecochain v3.5.64



Product: 3064033 - PE80 Pipe BK/BR 63x3,8 PN8 SDR17 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	9.53E+0	8.05E-1	3.02E-1	1.06E+1	1.12E-1	4.18E+0	6.23E-2	-6.01E+0	8.98E+0
GWP-f	kg CO2 eq	9.50E+0	8.05E-1	2.19E-1	1.05E+1	1.12E-1	4.18E+0	6.23E-2	-5.99E+0	8.89E+0
GWP-b	kg CO2 eq	3.25E-2	3.66E-4	5.76E-2	9.04E-2	6.82E-5	-4.55E-3	4.67E-5	-2.11E-2	6.49E-2
GWP-luluc	kg CO2 eq	3.38E-3	2.97E-4	2.55E-2	2.91E-2	3.98E-5	6.37E-4	8.93E-7	-1.27E-3	2.85E-2
ODP	kg CFC11 eq	5.16E-7	1.77E-7	2.48E-8	7.19E-7	2.59E-8	8.40E-8	1.33E-9	-3.04E-7	5.26E-7
AP	mol H+ eq	3.64E-2	4.90E-3	1.85E-3	4.32E-2	6.40E-4	3.56E-3	3.17E-5	-1.60E-2	3.14E-2
EP-fw	kg P eq	1.78E-4	8.06E-6	4.04E-6	1.90E-4	9.25E-7	1.84E-5	4.11E-8	-7.21E-5	1.37E-4
EP-m	kg N eq	6.13E-3	1.70E-3	5.50E-4	8.38E-3	2.29E-4	1.05E-3	2.24E-5	-2.96E-3	6.72E-3
EP-T	mol N eq	6.91E-2	1.87E-2	6.03E-3	9.38E-2	2.52E-3	1.15E-2	1.29E-4	-3.29E-2	7.51E-2
POCP	kg NMVOC eq	3.21E-2	5.32E-3	1.67E-3	3.91E-2	7.22E-4	3.63E-3	5.04E-5	-1.53E-2	2.82E-2
ADP-mm	kg Sb eq	1.16E-4	2.02E-5	6.59E-6	1.43E-4	2.91E-6	1.39E-5	3.18E-8	-3.65E-5	1.23E-4
ADP-f	MJ	3.25E+2	1.21E+1	2.18E+0	3.39E+2	1.72E+0	1.11E+1	9.70E-2	-1.75E+2	1.78E+2
WDP	m3 depriv.	6.97E+0	4.31E-2	1.40E+0	8.41E+0	5.29E-3	2.17E-1	4.44E-4	-3.31E+0	5.33E+0
PM	disease inc.	3.44E-7	7.17E-8	3.13E-8	4.47E-7	1.01E-8	5.81E-8	6.66E-10	-1.26E-7	3.90E-7
IR	kBq U-235 eq	2.97E-1	5.08E-2	6.47E-3	3.55E-1	7.54E-3	3.36E-2	4.52E-4	-1.03E-1	2.93E-1
ETP-fw	CTUe	7.14E+1	1.08E+1	6.06E+0	8.82E+1	1.40E+0	1.27E+1	8.55E-2	-2.63E+1	7.61E+1
HTP-c	CTUh	3.44E-9	3.52E-10	2.40E-10	4.03E-9	4.98E-11	1.54E-9	2.36E-12	-1.19E-9	4.43E-9
HTP-nc	CTUh	7.13E-8	1.18E-8	6.53E-9	8.96E-8	1.67E-9	1.93E-8	5.44E-11	-1.86E-8	9.20E-8
SQP	Pt	1.64E+1	1.04E+1	2.86E-1	2.71E+1	1.48E+0	8.89E+0	2.49E-1	-5.57E+0	3.21E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.95E+0	1.51E-1	1.37E+1	1.98E+1	2.47E-2	5.47E-1	3.84E-3	-2.45E+0	1.79E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.95E+0	1.51E-1	1.37E+1	1.98E+1	2.47E-2	5.47E-1	3.84E-3	-2.45E+0	1.79E+1
PENRE	MJ	3.49E+2	1.29E+1	2.31E+0	3.64E+2	1.83E+0	1.18E+1	1.03E-1	-1.88E+2	1.89E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.49E+2	1.29E+1	2.31E+0	3.64E+2	1.83E+0	1.18E+1	1.03E-1	-1.88E+2	1.89E+2
PET	MJ	3.55E+2	1.30E+1	1.60E+1	3.84E+2	1.86E+0	1.24E+1	1.07E-1	-1.91E+2	2.07E+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	1.10E-1	1.47E-3	3.33E-2	1.45E-1	1.95E-4	6.46E-3	1.20E-4	-5.07E-2	1.01E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.39E-5	3.05E-5	3.31E-6	9.78E-5	4.41E-6	1.82E-5	1.16E-7	-6.08E-5	5.97E-5
NHWD	kg	4.23E-1	7.62E-1	1.02E-2	1.19E+0	1.07E-1	5.67E-1	4.27E-1	-1.44E-1	2.15E+0
RWD	kg	3.17E-4	7.96E-5	9.20E-6	4.05E-4	1.17E-5	4.26E-5	6.34E-7	-9.66E-5	3.64E-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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