

# Environmental Profile

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

Ecochain v3.5.64



Product: 3064043 - PE80 Pipe BK/BR 75x4,5 PN8 SDR17 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]

## 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	9.86E+1	9.44E+0	3.55E+0	1.12E+2	1.32E+0	4.79E+1	7.32E-1	-6.67E+1	9.48E+1
GWP-f	kg CO2 eq	1.02E+2	9.43E+0	2.58E+0	1.14E+2	1.32E+0	4.36E+1	7.32E-1	-6.65E+1	9.36E+1
GWP-b	kg CO2 eq	-3.88E+0	4.28E-3	6.78E-1	-3.20E+0	8.02E-4	4.31E+0	5.50E-4	-2.51E-1	8.65E-1
GWP-luluc	kg CO2 eq	3.39E-2	3.48E-3	2.99E-1	3.37E-1	4.68E-4	7.44E-3	1.05E-5	-1.57E-2	3.29E-1
ODP	kg CFC11 eq	5.65E-6	2.08E-6	2.92E-7	8.02E-6	3.05E-7	9.73E-7	1.56E-8	-3.22E-6	6.10E-6
AP	mol H+ eq	3.89E-1	5.75E-2	2.18E-2	4.68E-1	7.53E-3	4.11E-2	3.73E-4	-1.85E-1	3.32E-1
EP-fw	kg P eq	1.75E-3	9.45E-5	4.75E-5	1.89E-3	1.09E-5	2.15E-4	4.84E-7	-8.30E-4	1.28E-3
EP-m	kg N eq	6.55E-2	1.99E-2	6.46E-3	9.19E-2	2.69E-3	1.20E-2	2.64E-4	-3.41E-2	7.28E-2
EP-T	mol N eq	7.41E-1	2.20E-1	7.09E-2	1.03E+0	2.97E-2	1.33E-1	1.51E-3	-3.82E-1	8.13E-1
POCP	kg NMVOC eq	3.45E-1	6.24E-2	1.97E-2	4.27E-1	8.48E-3	4.18E-2	5.93E-4	-1.75E-1	3.02E-1
ADP-mm	kg Sb eq	1.29E-3	2.37E-4	7.75E-5	1.60E-3	3.42E-5	1.61E-4	3.74E-7	-4.28E-4	1.37E-3
ADP-f	MJ	3.60E+3	1.42E+2	2.56E+1	3.77E+3	2.03E+1	1.29E+2	1.14E+0	-1.99E+3	1.93E+3
WDP	m3 depriv.	7.78E+1	5.05E-1	1.65E+1	9.48E+1	6.22E-2	2.54E+0	5.22E-3	-3.85E+1	5.88E+1
PM	disease inc.	3.88E-6	8.41E-7	3.68E-7	5.09E-6	1.19E-7	6.73E-7	7.83E-9	-1.48E-6	4.41E-6
IR	kBq U-235 eq	3.17E+0	5.95E-1	7.61E-2	3.84E+0	8.87E-2	3.90E-1	5.32E-3	-1.20E+0	3.12E+0
ETP-fw	CTUe	6.95E+2	1.26E+2	7.13E+1	8.93E+2	1.65E+1	1.47E+2	1.01E+0	-3.06E+2	7.51E+2
HTP-c	CTUh	3.03E-8	4.12E-9	2.82E-9	3.72E-8	5.86E-10	1.77E-8	2.77E-11	-1.40E-8	4.15E-8
HTP-nc	CTUh	6.75E-7	1.38E-7	7.68E-8	8.90E-7	1.96E-8	2.21E-7	6.39E-10	-3.14E-7	8.17E-7
SQP	Pt	5.55E+2	1.22E+2	3.36E+0	6.81E+2	1.74E+1	1.03E+2	2.93E+0	-1.48E+2	6.57E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.18E+2	1.77E+0	1.61E+2	2.82E+2	2.91E-1	6.37E+0	4.51E-2	-4.57E+1	2.43E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.18E+2	1.77E+0	1.61E+2	2.82E+2	2.91E-1	6.37E+0	4.51E-2	-4.57E+1	2.43E+2
PENRE	MJ	3.86E+3	1.51E+2	2.72E+1	4.04E+3	2.15E+1	1.38E+2	1.21E+0	-2.15E+3	2.06E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.86E+3	1.51E+2	2.72E+1	4.04E+3	2.15E+1	1.38E+2	1.21E+0	-2.15E+3	2.06E+3
PET	MJ	3.98E+3	1.53E+2	1.89E+2	4.32E+3	2.18E+1	1.44E+2	1.26E+0	-2.19E+3	2.30E+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	1.19E+0	1.72E-2	3.92E-1	1.60E+0	2.30E-3	7.51E-2	1.41E-3	-5.90E-1	1.09E+0

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.86E-4	3.58E-4	3.90E-5	9.82E-4	5.19E-5	2.11E-4	1.37E-6	-5.92E-4	6.55E-4
NHWD	kg	4.10E+0	8.93E+0	1.19E-1	1.32E+1	1.26E+0	6.44E+0	5.03E+0	-1.65E+0	2.42E+1
RWD	kg	3.44E-3	9.33E-4	1.08E-4	4.49E-3	1.38E-4	4.94E-4	7.46E-6	-1.12E-3	4.01E-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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