

Environmental Profile

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

Ecochain v3.5.64



Product: 3064032 - PE80 Pipe BK/RD 63 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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.93E+1	6.73E+0	2.51E+0	6.86E+1	9.36E-1	4.86E+1	5.18E-1	-4.79E+1	7.08E+1
GWP-f	kg CO2 eq	7.59E+1	6.73E+0	1.82E+0	8.45E+1	9.35E-1	3.17E+1	5.18E-1	-4.77E+1	6.99E+1
GWP-b	kg CO2 eq	-1.66E+1	3.06E-3	4.80E-1	-1.61E+1	5.68E-4	1.69E+1	3.89E-4	-1.78E-1	5.85E-1
GWP-luluc	kg CO2 eq	3.29E-2	2.48E-3	2.12E-1	2.47E-1	3.31E-4	5.31E-3	7.44E-6	-1.31E-2	2.40E-1
ODP	kg CFC11 eq	4.33E-6	1.48E-6	2.06E-7	6.02E-6	2.16E-7	7.08E-7	1.11E-8	-2.38E-6	4.58E-6
AP	mol H+ eq	2.97E-1	4.10E-2	1.54E-2	3.53E-1	5.33E-3	3.06E-2	2.64E-4	-1.38E-1	2.52E-1
EP-fw	kg P eq	1.37E-3	6.74E-5	3.36E-5	1.47E-3	7.70E-6	1.54E-4	3.43E-7	-6.10E-4	1.02E-3
EP-m	kg N eq	5.18E-2	1.42E-2	4.58E-3	7.06E-2	1.91E-3	9.16E-3	1.87E-4	-2.61E-2	5.58E-2
EP-T	mol N eq	5.91E-1	1.57E-1	5.02E-2	7.98E-1	2.10E-2	1.01E-1	1.07E-3	-3.01E-1	6.20E-1
POCP	kg NMVOC eq	2.63E-1	4.45E-2	1.39E-2	3.21E-1	6.01E-3	3.15E-2	4.20E-4	-1.30E-1	2.29E-1
ADP-mm	kg Sb eq	9.60E-4	1.69E-4	5.49E-5	1.18E-3	2.42E-5	1.16E-4	2.65E-7	-3.08E-4	1.02E-3
ADP-f	MJ	2.61E+3	1.01E+2	1.81E+1	2.73E+3	1.44E+1	9.29E+1	8.07E-1	-1.42E+3	1.42E+3
WDP	m3 depriv.	5.69E+1	3.60E-1	1.17E+1	6.89E+1	4.41E-2	1.81E+0	3.70E-3	-2.74E+1	4.34E+1
PM	disease inc.	3.51E-6	6.00E-7	2.61E-7	4.37E-6	8.44E-8	4.91E-7	5.55E-9	-1.16E-6	3.79E-6
IR	kBq U-235 eq	2.41E+0	4.24E-1	5.39E-2	2.89E+0	6.28E-2	2.82E-1	3.76E-3	-8.69E-1	2.37E+0
ETP-fw	CTUe	5.72E+2	9.01E+1	5.05E+1	7.12E+2	1.17E+1	1.06E+2	7.12E-1	-2.74E+2	5.56E+2
HTP-c	CTUh	2.71E-8	2.94E-9	1.99E-9	3.21E-8	4.15E-10	1.36E-8	1.96E-11	-1.08E-8	3.53E-8
HTP-nc	CTUh	5.42E-7	9.83E-8	5.44E-8	6.95E-7	1.39E-8	1.61E-7	4.52E-10	-2.48E-7	6.23E-7
SQP	Pt	1.66E+3	8.72E+1	2.38E+0	1.75E+3	1.23E+1	7.42E+1	2.07E+0	-3.73E+2	1.46E+3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.74E+2	1.26E+0	1.14E+2	3.89E+2	2.06E-1	4.55E+0	3.20E-2	-8.65E+1	3.08E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.74E+2	1.26E+0	1.14E+2	3.89E+2	2.06E-1	4.55E+0	3.20E-2	-8.65E+1	3.08E+2
PENRE	MJ	2.80E+3	1.08E+2	1.92E+1	2.93E+3	1.52E+1	9.90E+1	8.57E-1	-1.53E+3	1.51E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.80E+3	1.08E+2	1.92E+1	2.93E+3	1.52E+1	9.90E+1	8.57E-1	-1.53E+3	1.51E+3
PET	MJ	3.07E+3	1.09E+2	1.33E+2	3.31E+3	1.55E+1	1.04E+2	8.88E-1	-1.62E+3	1.82E+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	8.92E-1	1.23E-2	2.77E-1	1.18E+0	1.62E-3	5.51E-2	9.98E-4	-4.20E-1	8.18E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.21E-4	2.55E-4	2.76E-5	8.04E-4	3.67E-5	1.53E-4	9.69E-7	-4.37E-4	5.58E-4
NHWD	kg	3.61E+0	6.37E+0	8.45E-2	1.01E+1	8.90E-1	4.87E+0	3.56E+0	-1.29E+0	1.81E+1
RWD	kg	2.62E-3	6.65E-4	7.66E-5	3.36E-3	9.77E-5	3.58E-4	5.28E-6	-8.14E-4	3.01E-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



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