

Environmental Profile

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

Ecochain v3.5.64



Product: 3064075 - PE80 Pipe BK/BR 63x5,8 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

This document and supporting material contain confidential and proprietary business information of Wavin - SE - Eskilstuna. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - SE - Eskilstuna.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.36E+1	1.19E+0	4.43E-1	1.53E+1	1.66E-1	5.92E+0	9.19E-2	-8.69E+0	1.27E+1
GWP-f	kg CO2 eq	1.36E+1	1.19E+0	3.21E-1	1.51E+1	1.66E-1	5.92E+0	9.19E-2	-8.66E+0	1.26E+1
GWP-b	kg CO2 eq	5.28E-2	5.38E-4	8.44E-2	1.38E-1	1.01E-4	-6.69E-3	6.90E-5	-3.12E-2	1.00E-1
GWP-luluc	kg CO2 eq	4.62E-3	4.38E-4	3.73E-2	4.24E-2	5.87E-5	9.38E-4	1.32E-6	-1.87E-3	4.15E-2
ODP	kg CFC11 eq	7.40E-7	2.61E-7	3.64E-8	1.04E-6	3.82E-8	1.23E-7	1.96E-9	-4.32E-7	7.69E-7
AP	mol H+ eq	5.18E-2	7.22E-3	2.72E-3	6.17E-2	9.45E-4	5.21E-3	4.68E-5	-2.34E-2	4.45E-2
EP-fw	kg P eq	2.46E-4	1.19E-5	5.92E-6	2.64E-4	1.36E-6	2.71E-5	6.07E-8	-1.05E-4	1.87E-4
EP-m	kg N eq	8.70E-3	2.50E-3	8.06E-4	1.20E-2	3.38E-4	1.52E-3	3.31E-5	-4.31E-3	9.59E-3
EP-T	mol N eq	9.80E-2	2.76E-2	8.84E-3	1.34E-1	3.72E-3	1.68E-2	1.90E-4	-4.79E-2	1.07E-1
POCP	kg NMVOC eq	4.57E-2	7.84E-3	2.46E-3	5.60E-2	1.06E-3	5.29E-3	7.44E-5	-2.23E-2	4.01E-2
ADP-mm	kg Sb eq	1.67E-4	2.98E-5	9.66E-6	2.06E-4	4.29E-6	2.04E-5	4.69E-8	-5.38E-5	1.77E-4
ADP-f	MJ	4.70E+2	1.78E+1	3.19E+0	4.91E+2	2.55E+0	1.63E+1	1.43E-1	-2.55E+2	2.55E+2
WDP	m3 depriv.	1.01E+1	6.35E-2	2.05E+0	1.22E+1	7.81E-3	3.19E-1	6.56E-4	-4.87E+0	7.67E+0
PM	disease inc.	4.91E-7	1.06E-7	4.59E-8	6.42E-7	1.50E-8	8.51E-8	9.83E-10	-1.85E-7	5.58E-7
IR	kBq U-235 eq	4.22E-1	7.48E-2	9.48E-3	5.07E-1	1.11E-2	4.93E-2	6.67E-4	-1.51E-1	4.16E-1
ETP-fw	CTUe	9.81E+1	1.59E+1	8.89E+0	1.23E+2	2.07E+0	1.86E+1	1.26E-1	-3.80E+1	1.06E+2
HTP-c	CTUh	4.58E-9	5.18E-10	3.51E-10	5.45E-9	7.36E-11	2.24E-9	3.48E-12	-1.75E-9	6.03E-9
HTP-nc	CTUh	9.76E-8	1.73E-8	9.57E-9	1.25E-7	2.46E-9	2.82E-8	8.02E-11	-3.10E-8	1.24E-7
SQP	Pt	2.26E+1	1.54E+1	4.19E-1	3.84E+1	2.18E+0	1.30E+1	3.67E-1	-8.11E+0	4.59E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.29E+0	2.22E-1	2.01E+1	2.86E+1	3.65E-2	8.04E-1	5.66E-3	-3.61E+0	2.59E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.29E+0	2.22E-1	2.01E+1	2.86E+1	3.65E-2	8.04E-1	5.66E-3	-3.61E+0	2.59E+1
PENRE	MJ	5.04E+2	1.89E+1	3.39E+0	5.26E+2	2.70E+0	1.74E+1	1.52E-1	-2.75E+2	2.71E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.04E+2	1.89E+1	3.39E+0	5.26E+2	2.70E+0	1.74E+1	1.52E-1	-2.75E+2	2.71E+2
PET	MJ	5.12E+2	1.92E+1	2.35E+1	5.55E+2	2.74E+0	1.82E+1	1.58E-1	-2.79E+2	2.97E+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	1.57E-1	2.16E-3	4.88E-2	2.08E-1	2.88E-4	9.47E-3	1.77E-4	-7.45E-2	1.44E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.58E-5	4.50E-5	4.86E-6	1.36E-4	6.51E-6	2.67E-5	1.72E-7	-8.44E-5	8.46E-5
NHWD	kg	5.77E-1	1.12E+0	1.49E-2	1.71E+0	1.58E-1	8.23E-1	6.31E-1	-2.09E-1	3.12E+0
RWD	kg	4.53E-4	1.17E-4	1.35E-5	5.84E-4	1.73E-5	6.25E-5	9.36E-7	-1.42E-4	5.23E-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



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