

Environmental Profile

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

Ecochain v3.5.64



Product: 3064065 - PE80 Pipe BK/BL 90 SDR11 L= 50
Unit: 1 piece
Manufacturer: Wavin - SE - Eskilstuna

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.

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



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					Use stage							End-of-Life stage				
A1 Raw material supply A2 Transport A3 Manufacturing					B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment B6 Operational energy use B7 Operational water use							C1 De-construction demolition C2 Transport C3 Waste processing C4 Disposal				
Construction process stage												Benefits and loads beyond the system boundaries				
A4 Transport gate to site A5 Assembly / Construction installation process												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	2.10E+2	1.98E+1	7.45E+0	2.37E+2	2.78E+0	9.51E+1	1.54E+0	-1.40E+2	1.97E+2
GWP-f	kg CO2 eq	2.13E+2	1.98E+1	5.40E+0	2.39E+2	2.77E+0	9.09E+1	1.54E+0	-1.39E+2	1.95E+2
GWP-b	kg CO2 eq	-3.33E+0	8.98E-3	1.42E+0	-1.90E+0	1.68E-3	4.25E+0	1.15E-3	-5.26E-1	1.83E+0
GWP-luluc	kg CO2 eq	6.76E-2	7.30E-3	6.28E-1	7.03E-1	9.82E-4	1.56E-2	2.20E-5	-3.22E-2	6.88E-1
ODP	kg CFC11 eq	1.17E-5	4.36E-6	6.12E-7	1.67E-5	6.39E-7	2.03E-6	3.28E-8	-6.70E-6	1.27E-5
AP	mol H+ eq	8.06E-1	1.20E-1	4.58E-2	9.72E-1	1.58E-2	8.57E-2	7.82E-4	-3.86E-1	6.88E-1
EP-fw	kg P eq	3.59E-3	1.98E-4	9.97E-5	3.89E-3	2.28E-5	4.50E-4	1.02E-6	-1.73E-3	2.63E-3
EP-m	kg N eq	1.35E-1	4.17E-2	1.36E-2	1.90E-1	5.65E-3	2.50E-2	5.53E-4	-7.08E-2	1.51E-1
EP-T	mol N eq	1.53E+0	4.60E-1	1.49E-1	2.14E+0	6.23E-2	2.75E-1	3.18E-3	-7.91E-1	1.69E+0
POCP	kg NMVOC eq	7.15E-1	1.31E-1	4.13E-2	8.87E-1	1.78E-2	8.69E-2	1.24E-3	-3.66E-1	6.27E-1
ADP-mm	kg Sb eq	2.68E-3	4.97E-4	1.63E-4	3.34E-3	7.17E-5	3.38E-4	7.85E-7	-8.97E-4	2.85E-3
ADP-f	MJ	7.53E+3	2.98E+2	5.37E+1	7.88E+3	4.26E+1	2.71E+2	2.39E+0	-4.17E+3	4.03E+3
WDP	m3 depriv.	1.62E+2	1.06E+0	3.46E+1	1.98E+2	1.31E-1	5.32E+0	1.10E-2	-8.08E+1	1.23E+2
PM	disease inc.	7.86E-6	1.76E-6	7.72E-7	1.04E-5	2.50E-7	1.41E-6	1.64E-8	-3.07E-6	9.00E-6
IR	kBq U-235 eq	6.56E+0	1.25E+0	1.60E-1	7.97E+0	1.86E-1	8.16E-1	1.12E-2	-2.52E+0	6.46E+0
ETP-fw	CTUe	1.42E+3	2.65E+2	1.50E+2	1.84E+3	3.46E+1	3.07E+2	2.11E+0	-6.22E+2	1.56E+3
HTP-c	CTUh	6.14E-8	8.64E-9	5.91E-9	7.59E-8	1.23E-9	3.68E-8	5.81E-11	-2.90E-8	8.49E-8
HTP-nc	CTUh	1.39E-6	2.89E-7	1.61E-7	1.84E-6	4.12E-8	4.62E-7	1.34E-9	-6.51E-7	1.69E-6
SQP	Pt	7.25E+2	2.56E+2	7.06E+0	9.89E+2	3.64E+1	2.16E+2	6.14E+0	-2.17E+2	1.03E+3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.82E+2	3.71E+0	3.39E+2	5.25E+2	6.11E-1	1.34E+1	9.47E-2	-7.72E+1	4.61E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.82E+2	3.71E+0	3.39E+2	5.25E+2	6.11E-1	1.34E+1	9.47E-2	-7.72E+1	4.61E+2
PENRE	MJ	8.08E+3	3.16E+2	5.70E+1	8.45E+3	4.52E+1	2.88E+2	2.54E+0	-4.49E+3	4.29E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.08E+3	3.16E+2	5.70E+1	8.45E+3	4.52E+1	2.88E+2	2.54E+0	-4.49E+3	4.29E+3
PET	MJ	8.26E+3	3.20E+2	3.96E+2	8.97E+3	4.58E+1	3.02E+2	2.63E+0	-4.57E+3	4.75E+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	2.47E+0	3.60E-2	8.22E-1	3.33E+0	4.82E-3	1.57E-1	2.96E-3	-1.24E+0	2.26E+0

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.18E-3	7.50E-4	8.18E-5	2.01E-3	1.09E-4	4.41E-4	2.87E-6	-1.23E-3	1.33E-3
NHWD	kg	8.32E+0	1.87E+1	2.51E-1	2.73E+1	2.64E+0	1.34E+1	1.05E+1	-3.43E+0	5.04E+1
RWD	kg	7.14E-3	1.96E-3	2.27E-4	9.33E-3	2.90E-4	1.03E-3	1.57E-5	-2.34E-3	8.33E-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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