

Environmental Profile

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

Ecochain v3.5.71



Product: 3080893 - PVC-U Soil Pipe BK 110 L=4 S/S EN1453-1
 Unit: 1 piece
 Manufacturer: Wavin - IE - Balbriggan - Verified

LCA standard: EN15804+A2 (2019)
 Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
 Externally verified: Yes
 Issue date: 27-01-2023
 End of validity: 27-01-2028
 Verifier: martijn van Hövell - 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 - IE - Balbriggan - Verified (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 EN15804+A2 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF EN15804+A2 Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF EN15804+A2 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	1.15E+1	1.37E-1	8.11E-1	1.24E+1	1.71E-1	4.86E+0	4.92E-2	-6.62E+0	1.09E+1
GWP-f	kg CO2 eq	1.18E+1	1.37E-1	2.74E-1	1.22E+1	1.71E-1	4.45E+0	4.92E-2	-6.57E+0	1.03E+1
GWP-b	kg CO2 eq	-3.20E-1	4.82E-5	5.37E-1	2.17E-1	1.04E-4	4.10E-1	6.31E-5	-4.62E-2	5.81E-1
GWP-luluc	kg CO2 eq	9.24E-3	6.11E-5	9.33E-5	9.39E-3	6.05E-5	2.04E-3	1.31E-6	-4.33E-3	7.16E-3
ODP	kg CFC11 eq	6.69E-6	3.05E-8	3.09E-8	6.75E-6	3.94E-8	5.51E-7	1.96E-9	-3.30E-6	4.04E-6
AP	mol H+ eq	5.31E-2	1.85E-3	2.17E-3	5.71E-2	9.74E-4	9.45E-3	4.70E-5	-2.52E-2	4.24E-2
EP-fw	kg P eq	5.17E-4	9.61E-7	5.14E-6	5.23E-4	1.41E-6	6.79E-5	5.94E-8	-2.44E-4	3.48E-4
EP-m	kg N eq	8.92E-3	5.19E-4	3.13E-4	9.75E-3	3.49E-4	2.29E-3	2.89E-5	-4.37E-3	8.05E-3
EP-T	mol N eq	9.64E-2	5.75E-3	6.23E-3	1.08E-1	3.84E-3	2.53E-2	1.88E-4	-4.68E-2	9.09E-2
POCP	kg NMVOC eq	3.35E-2	1.55E-3	9.00E-4	3.60E-2	1.10E-3	7.59E-3	6.41E-5	-1.62E-2	2.86E-2
ADP-mm	kg Sb eq	3.36E-4	2.81E-6	8.82E-6	3.48E-4	4.42E-6	3.73E-5	4.66E-8	-1.35E-4	2.55E-4
ADP-f	MJ	3.06E+2	2.00E+0	3.51E+0	3.12E+2	2.62E+0	2.60E+1	1.42E-1	-1.60E+2	1.80E+2
WDP	m3 depriv.	1.99E+1	5.31E-3	1.30E-1	2.00E+1	8.06E-3	1.02E+0	7.96E-4	-9.51E+0	1.15E+1
PM	disease inc.	3.77E-7	1.00E-8	1.75E-8	4.04E-7	1.54E-8	1.18E-7	9.75E-10	-1.62E-7	3.77E-7
IR	kBq U-235 eq	6.53E-1	8.72E-3	3.49E-3	6.65E-1	1.15E-2	9.09E-2	6.53E-4	-3.07E-1	4.60E-1
ETP-fw	CTUe	1.98E+2	1.54E+0	7.32E+0	2.07E+2	2.13E+0	1.96E+2	2.16E+0	-9.36E+1	3.13E+2
HTP-c	CTUh	7.92E-9	6.53E-11	3.21E-10	8.31E-9	7.58E-11	2.82E-9	3.72E-12	-3.50E-9	7.71E-9
HTP-nc	CTUh	2.56E-7	1.71E-9	8.63E-9	2.66E-7	2.54E-9	6.87E-8	4.15E-10	-1.21E-7	2.16E-7
SQP	Pt	7.52E+1	1.35E+0	1.26E+0	7.78E+1	2.25E+0	1.62E+1	3.62E-1	-2.50E+1	7.16E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.01E+1	2.48E-2	8.96E+0	2.91E+1	3.77E-2	1.87E+0	5.17E-3	-8.53E+0	2.25E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.01E+1	2.48E-2	8.96E+0	2.91E+1	3.77E-2	1.87E+0	5.17E-3	-8.53E+0	2.25E+1
PENRE	MJ	3.28E+2	2.13E+0	3.84E+0	3.34E+2	2.79E+0	2.76E+1	1.51E-1	-1.72E+2	1.92E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.28E+2	2.13E+0	3.84E+0	3.34E+2	2.79E+0	2.76E+1	1.51E-1	-1.72E+2	1.92E+2
PET	MJ	3.48E+2	2.15E+0	1.28E+1	3.63E+2	2.82E+0	2.95E+1	1.56E-1	-1.81E+2	2.15E+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	2.11E-1	1.95E-4	3.19E-3	2.14E-1	2.97E-4	2.78E-2	1.74E-4	-9.96E-2	1.43E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.41E-4	4.29E-6	2.84E-3	3.08E-3	6.71E-6	4.18E-5	1.71E-7	-1.32E-4	3.00E-3
NHWD	kg	1.14E+0	9.39E-2	3.47E-2	1.27E+0	1.63E-1	9.57E-1	6.51E-1	-5.09E-1	2.54E+0
RWD	kg	5.83E-4	1.37E-5	4.50E-6	6.01E-4	1.79E-5	9.74E-5	9.29E-7	-2.71E-4	4.46E-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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