

Environmental Profile

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

Ecochain v3.5.71



Product: 3080895 - PVC-U Soil Pipe BK 110 L=6 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					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 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	1.73E+1	2.03E-1	1.22E+0	1.87E+1	2.56E-1	7.06E+0	7.37E-2	-9.90E+0	1.62E+1
GWP-f	kg CO2 eq	1.76E+1	2.03E-1	4.11E-1	1.82E+1	2.56E-1	6.65E+0	7.36E-2	-9.83E+0	1.54E+1
GWP-b	kg CO2 eq	-2.72E-1	7.14E-5	8.05E-1	5.33E-1	1.55E-4	4.08E-1	9.45E-5	-6.91E-2	8.72E-1
GWP-luluc	kg CO2 eq	1.37E-2	9.02E-5	1.40E-4	1.39E-2	9.06E-5	3.06E-3	1.97E-6	-6.46E-3	1.06E-2
ODP	kg CFC11 eq	1.00E-5	4.50E-8	4.64E-8	1.01E-5	5.90E-8	8.25E-7	2.93E-9	-4.95E-6	6.05E-6
AP	mol H+ eq	7.92E-2	2.73E-3	3.26E-3	8.52E-2	1.46E-3	1.41E-2	7.04E-5	-3.76E-2	6.32E-2
EP-fw	kg P eq	7.72E-4	1.42E-6	7.72E-6	7.81E-4	2.11E-6	1.02E-4	8.89E-8	-3.65E-4	5.20E-4
EP-m	kg N eq	1.33E-2	7.65E-4	4.70E-4	1.45E-2	5.22E-4	3.43E-3	4.32E-5	-6.52E-3	1.20E-2
EP-T	mol N eq	1.43E-1	8.47E-3	9.34E-3	1.61E-1	5.75E-3	3.78E-2	2.82E-4	-6.96E-2	1.35E-1
POCP	kg NMVOC eq	4.99E-2	2.28E-3	1.35E-3	5.35E-2	1.64E-3	1.13E-2	9.60E-5	-2.41E-2	4.25E-2
ADP-mm	kg Sb eq	4.98E-4	4.16E-6	1.32E-5	5.16E-4	6.62E-6	5.59E-5	6.98E-8	-2.02E-4	3.76E-4
ADP-f	MJ	4.57E+2	2.96E+0	5.27E+0	4.66E+2	3.93E+0	3.89E+1	2.13E-1	-2.40E+2	2.69E+2
WDP	m3 depriv.	2.98E+1	7.86E-3	1.95E-1	3.00E+1	1.21E-2	1.52E+0	1.19E-3	-1.42E+1	1.72E+1
PM	disease inc.	5.52E-7	1.48E-8	2.63E-8	5.94E-7	2.31E-8	1.77E-7	1.46E-9	-2.40E-7	5.54E-7
IR	kBq U-235 eq	9.74E-1	1.29E-2	5.24E-3	9.92E-1	1.72E-2	1.36E-1	9.78E-4	-4.60E-1	6.86E-1
ETP-fw	CTUe	2.95E+2	2.28E+0	1.10E+1	3.09E+2	3.19E+0	2.93E+2	3.24E+0	-1.39E+2	4.69E+2
HTP-c	CTUh	1.18E-8	9.64E-11	4.81E-10	1.24E-8	1.14E-10	4.21E-9	5.57E-12	-5.23E-9	1.15E-8
HTP-nc	CTUh	3.82E-7	2.52E-9	1.29E-8	3.97E-7	3.80E-9	1.03E-7	6.21E-10	-1.81E-7	3.23E-7
SQP	Pt	9.38E+1	2.00E+0	1.89E+0	9.77E+1	3.36E+0	2.42E+1	5.41E-1	-3.34E+1	9.24E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.73E+1	3.67E-2	1.34E+1	4.08E+1	5.64E-2	2.80E+0	7.74E-3	-1.20E+1	3.17E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.73E+1	3.67E-2	1.34E+1	4.08E+1	5.64E-2	2.80E+0	7.74E-3	-1.20E+1	3.17E+1
PENRE	MJ	4.91E+2	3.15E+0	5.76E+0	4.99E+2	4.17E+0	4.14E+1	2.26E-1	-2.58E+2	2.87E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.91E+2	3.15E+0	5.76E+0	4.99E+2	4.17E+0	4.14E+1	2.26E-1	-2.58E+2	2.87E+2
PET	MJ	5.18E+2	3.18E+0	1.92E+1	5.40E+2	4.23E+0	4.42E+1	2.34E-1	-2.70E+2	3.19E+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	3.15E-1	2.89E-4	4.78E-3	3.20E-1	4.45E-4	4.16E-2	2.61E-4	-1.49E-1	2.13E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.60E-4	6.34E-6	4.25E-3	4.62E-3	1.01E-5	6.26E-5	2.57E-7	-1.98E-4	4.50E-3
NHWD	kg	1.70E+0	1.39E-1	5.21E-2	1.89E+0	2.44E-1	1.43E+0	9.74E-1	-7.60E-1	3.78E+0
RWD	kg	8.68E-4	2.03E-5	6.75E-6	8.95E-4	2.67E-5	1.46E-4	1.39E-6	-4.06E-4	6.63E-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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