

Environmental Profile

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

Ecochain v3.5.71



Product: 3066452 - WavSpec SN8 PVC-U Pipe EN1401 V 110 L=6
 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	1.75E+1	3.46E-1	1.71E+0	1.95E+1	2.75E-1	7.26E+0	7.41E-2	-9.95E+0	1.72E+1
GWP-f	kg CO2 eq	1.77E+1	3.46E-1	5.77E-1	1.86E+1	2.75E-1	6.84E+0	7.41E-2	-9.87E+0	1.60E+1
GWP-b	kg CO2 eq	-2.70E-1	1.03E-4	1.13E+0	8.61E-1	1.67E-4	4.08E-1	9.58E-5	-6.95E-2	1.20E+0
GWP-luluc	kg CO2 eq	1.39E-2	1.61E-4	1.96E-4	1.42E-2	9.72E-5	3.17E-3	2.02E-6	-6.50E-3	1.10E-2
ODP	kg CFC11 eq	1.00E-5	7.62E-8	6.51E-8	1.02E-5	6.33E-8	8.43E-7	3.08E-9	-4.97E-6	6.10E-6
AP	mol H+ eq	8.00E-2	5.19E-3	4.57E-3	8.97E-2	1.56E-3	1.47E-2	7.34E-5	-3.78E-2	6.83E-2
EP-fw	kg P eq	7.82E-4	2.35E-6	1.08E-5	7.95E-4	2.26E-6	1.05E-4	9.13E-8	-3.67E-4	5.35E-4
EP-m	kg N eq	1.34E-2	1.42E-3	6.60E-4	1.55E-2	5.60E-4	3.58E-3	4.44E-5	-6.56E-3	1.31E-2
EP-T	mol N eq	1.46E-1	1.58E-2	1.31E-2	1.75E-1	6.17E-3	3.95E-2	2.94E-4	-7.01E-2	1.51E-1
POCP	kg NMVOC eq	5.04E-2	4.22E-3	1.90E-3	5.65E-2	1.76E-3	1.19E-2	9.96E-5	-2.42E-2	4.61E-2
ADP-mm	kg Sb eq	5.33E-4	6.73E-6	1.86E-5	5.58E-4	7.10E-6	5.83E-5	7.26E-8	-2.03E-4	4.21E-4
ADP-f	MJ	4.58E+2	5.01E+0	7.40E+0	4.70E+2	4.21E+0	4.08E+1	2.23E-1	-2.41E+2	2.75E+2
WDP	m3 depriv.	3.00E+1	1.29E-2	2.73E-1	3.03E+1	1.29E-2	1.56E+0	1.21E-3	-1.43E+1	1.76E+1
PM	disease inc.	5.49E-7	2.41E-8	3.69E-8	6.10E-7	2.48E-8	1.87E-7	1.52E-9	-2.42E-7	5.81E-7
IR	kBq U-235 eq	9.66E-1	2.18E-2	7.36E-3	9.95E-1	1.84E-2	1.42E-1	1.02E-3	-4.63E-1	6.94E-1
ETP-fw	CTUe	3.00E+2	3.81E+0	1.54E+1	3.19E+2	3.42E+0	2.97E+2	3.26E+0	-1.41E+2	4.82E+2
HTP-c	CTUh	1.21E-8	1.67E-10	6.75E-10	1.29E-8	1.22E-10	4.41E-9	5.69E-12	-5.26E-9	1.22E-8
HTP-nc	CTUh	3.87E-7	4.15E-9	1.82E-8	4.09E-7	4.08E-9	1.06E-7	6.28E-10	-1.82E-7	3.38E-7
SQP	Pt	9.53E+1	3.18E+0	2.66E+0	1.01E+2	3.61E+0	2.58E+1	5.64E-1	-3.36E+1	9.75E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.76E+1	6.01E-2	1.89E+1	4.65E+1	6.05E-2	2.90E+0	7.92E-3	-1.20E+1	3.74E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.76E+1	6.01E-2	1.89E+1	4.65E+1	6.05E-2	2.90E+0	7.92E-3	-1.20E+1	3.74E+1
PENRE	MJ	4.91E+2	5.32E+0	8.08E+0	5.04E+2	4.47E+0	4.34E+1	2.36E-1	-2.59E+2	2.93E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.91E+2	5.32E+0	8.08E+0	5.04E+2	4.47E+0	4.34E+1	2.36E-1	-2.59E+2	2.93E+2
PET	MJ	5.18E+2	5.38E+0	2.70E+1	5.51E+2	4.54E+0	4.63E+1	2.44E-1	-2.71E+2	3.31E+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	3.19E-1	4.72E-4	6.72E-3	3.26E-1	4.77E-4	4.28E-2	2.73E-4	-1.50E-1	2.20E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.67E-4	1.03E-5	5.97E-3	6.35E-3	1.08E-5	6.56E-5	2.68E-7	-1.99E-4	6.23E-3
NHWD	kg	1.76E+0	2.19E-1	7.32E-2	2.06E+0	2.61E-1	1.52E+0	1.04E+0	-7.64E-1	4.12E+0
RWD	kg	8.48E-4	3.43E-5	9.48E-6	8.91E-4	2.87E-5	1.53E-4	1.46E-6	-4.08E-4	6.67E-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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