

Environmental Profile

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

Ecochain v3.5.71



Product: 3075232 - WavSpec SN8 PVC-U Pipe EN13476 R 315 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	1.48E+2	2.23E+0	1.44E+1	1.65E+2	2.33E+0	6.19E+1	6.31E-1	-8.48E+1	1.45E+2
GWP-f	kg CO2 eq	1.51E+2	2.23E+0	4.87E+0	1.58E+2	2.33E+0	5.81E+1	6.31E-1	-8.41E+1	1.35E+2
GWP-b	kg CO2 eq	-2.63E+0	8.82E-4	9.56E+0	6.93E+0	1.42E-3	3.81E+0	8.16E-4	-5.93E-1	1.01E+1
GWP-luluc	kg CO2 eq	1.18E-1	9.55E-4	1.66E-3	1.21E-1	8.25E-4	2.70E-2	1.72E-5	-5.54E-2	9.33E-2
ODP	kg CFC11 eq	8.57E-5	4.98E-7	5.51E-7	8.67E-5	5.37E-7	7.18E-6	2.62E-8	-4.23E-5	5.21E-5
AP	mol H+ eq	6.81E-1	2.71E-2	3.86E-2	7.46E-1	1.33E-2	1.25E-1	6.24E-4	-3.22E-1	5.63E-1
EP-fw	kg P eq	6.65E-3	1.61E-5	9.16E-5	6.76E-3	1.92E-5	8.95E-4	7.75E-7	-3.13E-3	4.54E-3
EP-m	kg N eq	1.14E-1	7.77E-3	5.58E-3	1.28E-1	4.75E-3	3.05E-2	3.77E-4	-5.59E-2	1.07E-1
EP-T	mol N eq	1.24E+0	8.61E-2	1.11E-1	1.44E+0	5.23E-2	3.36E-1	2.50E-3	-5.98E-1	1.23E+0
POCP	kg NMVOC eq	4.29E-1	2.33E-2	1.60E-2	4.68E-1	1.50E-2	1.01E-1	8.46E-4	-2.07E-1	3.78E-1
ADP-mm	kg Sb eq	4.42E-3	4.76E-5	1.57E-4	4.62E-3	6.03E-5	4.96E-4	6.16E-7	-1.73E-3	3.45E-3
ADP-f	MJ	3.91E+3	3.28E+1	6.25E+1	4.00E+3	3.58E+1	3.47E+2	1.89E+0	-2.05E+3	2.33E+3
WDP	m3 depriv.	2.56E+2	8.93E-2	2.31E+0	2.58E+2	1.10E-1	1.33E+1	1.02E-2	-1.22E+2	1.50E+2
PM	disease inc.	4.72E-6	1.69E-7	3.12E-7	5.20E-6	2.10E-7	1.59E-6	1.29E-8	-2.06E-6	4.95E-6
IR	kBq U-235 eq	8.28E+0	1.43E-1	6.22E-2	8.49E+0	1.56E-1	1.21E+0	8.68E-3	-3.95E+0	5.92E+0
ETP-fw	CTUe	2.55E+3	2.55E+1	1.30E+2	2.71E+3	2.90E+1	2.53E+3	2.78E+1	-1.20E+3	4.09E+3
HTP-c	CTUh	1.02E-7	1.05E-9	5.71E-9	1.09E-7	1.03E-9	3.74E-8	4.83E-11	-4.48E-8	1.03E-7
HTP-nc	CTUh	3.29E-6	2.86E-8	1.54E-7	3.47E-6	3.46E-8	9.02E-7	5.35E-9	-1.55E-6	2.87E-6
SQP	Pt	8.42E+2	2.31E+1	2.25E+1	8.87E+2	3.06E+1	2.19E+2	4.79E+0	-2.92E+2	8.49E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.39E+2	4.18E-1	1.60E+2	3.99E+2	5.13E-1	2.47E+1	6.74E-2	-1.04E+2	3.20E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.39E+2	4.18E-1	1.60E+2	3.99E+2	5.13E-1	2.47E+1	6.74E-2	-1.04E+2	3.20E+2
PENRE	MJ	4.19E+3	3.49E+1	6.83E+1	4.29E+3	3.80E+1	3.69E+2	2.01E+0	-2.21E+3	2.49E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.19E+3	3.49E+1	6.83E+1	4.29E+3	3.80E+1	3.69E+2	2.01E+0	-2.21E+3	2.49E+3
PET	MJ	4.43E+3	3.53E+1	2.28E+2	4.69E+3	3.85E+1	3.94E+2	2.08E+0	-2.31E+3	2.81E+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	2.71E+0	3.28E-3	5.68E-2	2.77E+0	4.05E-3	3.64E-1	2.32E-3	-1.28E+0	1.86E+0

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.12E-3	7.26E-5	5.05E-2	5.37E-2	9.15E-5	5.58E-4	2.27E-6	-1.69E-3	5.26E-2
NHWD	kg	1.50E+1	1.63E+0	6.18E-1	1.72E+1	2.22E+0	1.29E+1	8.86E+0	-6.51E+0	3.47E+1
RWD	kg	7.31E-3	2.24E-4	8.01E-5	7.62E-3	2.43E-4	1.30E-3	1.24E-5	-3.48E-3	5.70E-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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