

Environmental Profile

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

Ecochain v3.5.71



Product: 3085145 - WavSpec SN8 PVC-U Pipe EN1401 160 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	3.81E+1	7.53E-1	3.68E+0	4.25E+1	5.98E-1	1.57E+1	1.61E-1	-2.16E+1	3.74E+1
GWP-f	kg CO2 eq	3.86E+1	7.52E-1	1.24E+0	4.06E+1	5.97E-1	1.49E+1	1.61E-1	-2.15E+1	3.48E+1
GWP-b	kg CO2 eq	-4.93E-1	2.25E-4	2.43E+0	1.94E+0	3.63E-4	7.91E-1	2.09E-4	-1.51E-1	2.58E+0
GWP-luluc	kg CO2 eq	3.02E-2	3.50E-4	4.23E-4	3.10E-2	2.11E-4	6.90E-3	4.41E-6	-1.41E-2	2.40E-2
ODP	kg CFC11 eq	2.18E-5	1.66E-7	1.40E-7	2.21E-5	1.38E-7	1.83E-6	6.71E-9	-1.08E-5	1.33E-5
AP	mol H+ eq	1.74E-1	1.13E-2	9.84E-3	1.95E-1	3.40E-3	3.20E-2	1.60E-4	-8.22E-2	1.49E-1
EP-fw	kg P eq	1.70E-3	5.10E-6	2.33E-5	1.73E-3	4.91E-6	2.29E-4	1.99E-7	-7.98E-4	1.16E-3
EP-m	kg N eq	2.92E-2	3.09E-3	1.42E-3	3.37E-2	1.22E-3	7.79E-3	9.69E-5	-1.42E-2	2.86E-2
EP-T	mol N eq	3.17E-1	3.43E-2	2.82E-2	3.79E-1	1.34E-2	8.59E-2	6.40E-4	-1.52E-1	3.27E-1
POCP	kg NMVOC eq	1.10E-1	9.17E-3	4.08E-3	1.23E-1	3.83E-3	2.59E-2	2.17E-4	-5.27E-2	1.00E-1
ADP-mm	kg Sb eq	1.18E-3	1.46E-5	4.00E-5	1.23E-3	1.55E-5	1.27E-4	1.58E-7	-4.42E-4	9.34E-4
ADP-f	MJ	9.96E+2	1.09E+1	1.59E+1	1.02E+3	9.17E+0	8.88E+1	4.85E-1	-5.24E+2	5.98E+2
WDP	m3 depriv.	6.53E+1	2.80E-2	5.88E-1	6.59E+1	2.81E-2	3.40E+0	2.62E-3	-3.11E+1	3.82E+1
PM	disease inc.	1.19E-6	5.24E-8	7.94E-8	1.32E-6	5.39E-8	4.06E-7	3.32E-9	-5.25E-7	1.26E-6
IR	kBq U-235 eq	2.10E+0	4.73E-2	1.58E-2	2.17E+0	4.01E-2	3.09E-1	2.22E-3	-1.01E+0	1.51E+0
ETP-fw	CTUe	6.52E+2	8.27E+0	3.32E+1	6.94E+2	7.44E+0	6.46E+2	7.09E+0	-3.06E+2	1.05E+3
HTP-c	CTUh	2.62E-8	3.64E-10	1.45E-9	2.81E-8	2.65E-10	9.57E-9	1.24E-11	-1.14E-8	2.65E-8
HTP-nc	CTUh	8.41E-7	9.01E-9	3.91E-8	8.89E-7	8.87E-9	2.30E-7	1.36E-9	-3.95E-7	7.35E-7
SQP	Pt	1.99E+2	6.92E+0	5.72E+0	2.11E+2	7.84E+0	5.60E+1	1.23E+0	-7.12E+1	2.05E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.87E+1	1.31E-1	4.06E+1	9.94E+1	1.32E-1	6.30E+0	1.72E-2	-2.58E+1	8.01E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.87E+1	1.31E-1	4.06E+1	9.94E+1	1.32E-1	6.30E+0	1.72E-2	-2.58E+1	8.01E+1
PENRE	MJ	1.07E+3	1.16E+1	1.74E+1	1.10E+3	9.73E+0	9.45E+1	5.15E-1	-5.64E+2	6.39E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.07E+3	1.16E+1	1.74E+1	1.10E+3	9.73E+0	9.45E+1	5.15E-1	-5.64E+2	6.39E+2
PET	MJ	1.13E+3	1.17E+1	5.80E+1	1.20E+3	9.86E+0	1.01E+2	5.32E-1	-5.90E+2	7.19E+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	6.94E-1	1.03E-3	1.45E-2	7.10E-1	1.04E-3	9.31E-2	5.94E-4	-3.26E-1	4.78E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.98E-4	2.24E-5	1.29E-2	1.37E-2	2.34E-5	1.43E-4	5.83E-7	-4.33E-4	1.34E-2
NHWD	kg	3.83E+0	4.76E-1	1.57E-1	4.47E+0	5.68E-1	3.30E+0	2.27E+0	-1.66E+0	8.95E+0
RWD	kg	1.85E-3	7.45E-5	2.04E-5	1.94E-3	6.23E-5	3.33E-4	3.17E-6	-8.88E-4	1.45E-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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