

Environmental Profile

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

Ecochain v3.5.71



Product: 3079707 - Wavin PVCU Bossed Pipe BK 110 S/S
 Unit: 1 piece
 Manufacturer: Wavin - UK - Chippenham - Verified

LCA standard: EN15804+A2 (2019)
 Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
 Externally verified: Yes
 Issue date: 09-02-2023
 End of validity: 09-02-2028
 Verifier: Martijn van Hövell - SGS Search



When specifying a PVC-U Soil system for your industrial and commercial project, you need a system that has been designed specifically for that environment. Wavin Solvent Soil is a PVC-U system that enables space saving and flexible installations for efficient removal of waste water.

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 - UK - Chippenham - 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	1.21E+0	5.03E-2	1.15E-1	1.38E+0	1.53E-2	4.72E-1	4.89E-3	-6.75E-1	1.19E+0
GWP-f	kg CO2 eq	1.20E+0	5.03E-2	1.12E-1	1.37E+0	1.53E-2	4.72E-1	4.89E-3	-6.71E-1	1.19E+0
GWP-b	kg CO2 eq	7.57E-3	-8.27E-6	2.32E-3	9.88E-3	9.30E-6	-4.26E-4	6.05E-6	-4.46E-3	5.01E-3
GWP-luluc	kg CO2 eq	9.75E-4	3.22E-5	1.04E-4	1.11E-3	5.42E-6	1.85E-4	1.28E-7	-4.11E-4	8.90E-4
ODP	kg CFC11 eq	6.22E-7	1.03E-8	9.27E-9	6.41E-7	3.53E-9	4.99E-8	1.80E-10	-3.20E-7	3.75E-7
AP	mol H+ eq	5.57E-3	1.43E-3	6.27E-4	7.62E-3	8.73E-5	8.59E-4	4.39E-6	-2.45E-3	6.13E-3
EP-fw	kg P eq	5.28E-5	2.38E-7	1.59E-6	5.46E-5	1.26E-7	6.14E-6	5.76E-9	-2.34E-5	3.75E-5
EP-m	kg N eq	9.37E-4	3.56E-4	1.17E-4	1.41E-3	3.12E-5	2.09E-4	2.82E-6	-4.26E-4	1.23E-3
EP-T	mol N eq	1.02E-2	3.96E-3	1.29E-3	1.55E-2	3.44E-4	2.31E-3	1.75E-5	-4.53E-3	1.36E-2
POCP	kg NMVOC eq	3.60E-3	1.03E-3	5.39E-4	5.17E-3	9.84E-5	6.91E-4	6.03E-6	-1.59E-3	4.38E-3
ADP-mm	kg Sb eq	6.43E-4	5.15E-7	3.00E-6	6.47E-4	3.96E-7	3.37E-6	4.41E-9	-1.30E-5	6.38E-4
ADP-f	MJ	3.16E+1	6.62E-1	1.24E+0	3.35E+1	2.35E-1	2.35E+0	1.32E-2	-1.62E+1	1.99E+1
WDP	m3 depriv.	1.91E+0	1.16E-3	3.61E-2	1.95E+0	7.22E-4	9.22E-2	8.97E-5	-9.17E-1	1.12E+0
PM	disease inc.	3.88E-8	2.00E-9	4.34E-9	4.51E-8	1.38E-9	1.07E-8	9.06E-11	-1.55E-8	4.18E-8
IR	kBq U-235 eq	6.74E-2	2.85E-3	2.87E-3	7.31E-2	1.03E-3	8.21E-3	6.05E-5	-2.96E-2	5.28E-2
ETP-fw	CTUe	2.50E+1	4.46E-1	3.44E+0	2.89E+1	1.91E-1	1.78E+1	1.97E-1	-8.83E+0	3.82E+1
HTP-c	CTUh	8.75E-10	2.76E-11	1.35E-10	1.04E-9	6.80E-12	2.69E-10	3.64E-13	-3.37E-10	9.77E-10
HTP-nc	CTUh	2.80E-8	3.94E-10	6.44E-9	3.48E-8	2.28E-10	6.29E-9	3.81E-11	-1.16E-8	2.98E-8
SQP	Pt	4.03E+0	1.74E-1	4.44E-1	4.65E+0	2.01E-1	1.46E+0	3.36E-2	-1.64E+0	4.70E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.48E+0	5.36E-3	7.42E+0	8.91E+0	3.37E-3	1.69E-1	4.88E-4	-6.66E-1	8.41E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.48E+0	5.36E-3	7.42E+0	8.91E+0	3.37E-3	1.69E-1	4.88E-4	-6.66E-1	8.41E+0
PENRE	MJ	3.39E+1	7.03E-1	1.32E+0	3.59E+1	2.50E-1	2.50E+0	1.40E-2	-1.75E+1	2.12E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.39E+1	7.03E-1	1.32E+0	3.59E+1	2.50E-1	2.50E+0	1.40E-2	-1.75E+1	2.12E+1
PET	MJ	3.54E+1	7.09E-1	8.74E+0	4.48E+1	2.53E-1	2.67E+0	1.45E-2	-1.82E+1	2.96E+1
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	2.17E-2	4.17E-5	1.08E-3	2.28E-2	2.66E-5	2.53E-3	1.61E-5	-9.63E-3	1.57E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.88E-5	7.98E-7	9.35E-6	1.09E-4	6.01E-7	3.80E-6	1.61E-8	-1.33E-5	1.00E-4
NHWD	kg	1.13E-1	8.54E-3	1.95E-3	1.23E-1	1.46E-2	8.81E-2	5.83E-2	-4.88E-2	2.35E-1
RWD	kg	6.14E-5	4.59E-6	2.48E-6	6.84E-5	1.60E-6	8.79E-6	8.57E-8	-2.62E-5	5.27E-5
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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