

Environmental Profile

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

Ecochain v3.5.71



Product: 3079705 - Wavin PVCU Acc Brch 90° BK 110x110 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					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	1.95E+0	8.44E-2	2.26E-1	2.26E+0	2.60E-2	7.15E-1	8.32E-3	-1.09E+0	1.93E+0
GWP-f	kg CO2 eq	1.94E+0	8.44E-2	2.22E-1	2.24E+0	2.59E-2	7.16E-1	8.32E-3	-1.08E+0	1.91E+0
GWP-b	kg CO2 eq	1.52E-2	-1.37E-5	4.50E-3	1.96E-2	1.58E-5	-7.27E-4	1.02E-5	-7.50E-3	1.14E-2
GWP-luluc	kg CO2 eq	1.57E-3	5.39E-5	2.05E-4	1.83E-3	9.18E-6	3.10E-4	2.17E-7	-6.91E-4	1.46E-3
ODP	kg CFC11 eq	1.04E-6	1.73E-8	1.81E-8	1.08E-6	5.98E-9	8.35E-8	3.06E-10	-5.33E-7	6.33E-7
AP	mol H+ eq	9.01E-3	2.40E-3	1.24E-3	1.26E-2	1.48E-4	1.43E-3	7.43E-6	-4.09E-3	1.01E-2
EP-fw	kg P eq	8.61E-5	4.00E-7	3.14E-6	8.96E-5	2.13E-7	1.03E-5	9.77E-9	-3.94E-5	6.08E-5
EP-m	kg N eq	1.51E-3	5.97E-4	2.30E-4	2.33E-3	5.29E-5	3.47E-4	4.83E-6	-7.06E-4	2.03E-3
EP-T	mol N eq	1.64E-2	6.63E-3	2.53E-3	2.56E-2	5.83E-4	3.83E-3	2.96E-5	-7.52E-3	2.25E-2
POCP	kg NMVOC eq	5.73E-3	1.73E-3	1.06E-3	8.51E-3	1.67E-4	1.15E-3	1.02E-5	-2.63E-3	7.21E-3
ADP-mm	kg Sb eq	1.13E-3	8.68E-7	5.94E-6	1.14E-3	6.71E-7	5.66E-6	7.47E-9	-2.19E-5	1.13E-3
ADP-f	MJ	5.09E+1	1.11E+0	2.45E+0	5.45E+1	3.98E-1	3.94E+0	2.23E-2	-2.66E+1	3.23E+1
WDP	m3 depriv.	3.14E+0	1.95E-3	7.09E-2	3.21E+0	1.22E-3	1.55E-1	1.53E-4	-1.54E+0	1.82E+0
PM	disease inc.	6.26E-8	3.37E-9	8.58E-9	7.46E-8	2.34E-9	1.79E-8	1.53E-10	-2.61E-8	6.88E-8
IR	kBq U-235 eq	1.12E-1	4.79E-3	5.64E-3	1.22E-1	1.74E-3	1.38E-2	1.02E-4	-4.97E-2	8.81E-2
ETP-fw	CTUe	4.13E+1	7.50E-1	6.81E+0	4.89E+1	3.23E-1	2.98E+1	3.30E-1	-1.48E+1	6.45E+1
HTP-c	CTUh	1.46E-9	4.62E-11	2.67E-10	1.78E-9	1.15E-11	4.43E-10	6.18E-13	-5.64E-10	1.67E-9
HTP-nc	CTUh	4.67E-8	6.63E-10	1.26E-8	6.00E-8	3.85E-10	1.05E-8	6.39E-11	-1.95E-8	5.14E-8
SQP	Pt	6.47E+0	2.95E-1	8.78E-1	7.64E+0	3.41E-1	2.45E+0	5.70E-2	-2.74E+0	7.74E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.40E+0	9.01E-3	1.47E+1	1.71E+1	5.71E-3	2.84E-1	8.27E-4	-1.12E+0	1.63E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.40E+0	9.01E-3	1.47E+1	1.71E+1	5.71E-3	2.84E-1	8.27E-4	-1.12E+0	1.63E+1
PENRE	MJ	5.46E+1	1.18E+0	2.60E+0	5.84E+1	4.23E-1	4.19E+0	2.37E-2	-2.86E+1	3.44E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.46E+1	1.18E+0	2.60E+0	5.84E+1	4.23E-1	4.19E+0	2.37E-2	-2.86E+1	3.44E+1
PET	MJ	5.70E+1	1.19E+0	1.73E+1	7.55E+1	4.28E-1	4.47E+0	2.45E-2	-2.97E+1	5.07E+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	3.49E-2	7.01E-5	2.12E-3	3.71E-2	4.51E-5	4.24E-3	2.73E-5	-1.62E-2	2.53E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.72E-4	1.34E-6	1.82E-5	1.91E-4	1.02E-6	6.36E-6	2.72E-8	-2.14E-5	1.77E-4
NHWD	kg	1.83E-1	1.45E-2	3.80E-3	2.02E-1	2.47E-2	1.45E-1	9.87E-2	-8.20E-2	3.88E-1
RWD	kg	1.03E-4	7.71E-6	4.81E-6	1.15E-4	2.71E-6	1.47E-5	1.45E-7	-4.38E-5	8.89E-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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