

Environmental Profile

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

Ecochain v3.5.71



Product: 3079701 - Wavin PVCU Pipe Coupler BK 110
 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	4.84E-1	2.12E-2	3.38E-2	5.39E-1	6.32E-3	1.78E-1	2.17E-3	-2.68E-1	4.56E-1
GWP-f	kg CO2 eq	4.81E-1	2.11E-2	3.28E-2	5.35E-1	6.32E-3	1.78E-1	2.17E-3	-2.67E-1	4.55E-1
GWP-b	kg CO2 eq	2.38E-3	-2.26E-7	9.19E-4	3.29E-3	3.84E-6	-1.90E-4	2.52E-6	-1.76E-3	1.35E-3
GWP-luluc	kg CO2 eq	3.65E-4	1.23E-5	2.66E-5	4.04E-4	2.24E-6	6.83E-5	5.29E-8	-1.59E-4	3.15E-4
ODP	kg CFC11 eq	2.24E-7	4.45E-9	3.08E-9	2.31E-7	1.46E-9	1.76E-8	7.45E-11	-1.20E-7	1.30E-7
AP	mol H+ eq	2.25E-3	5.06E-4	1.74E-4	2.93E-3	3.60E-5	3.22E-4	1.81E-6	-9.83E-4	2.30E-3
EP-fw	kg P eq	1.98E-5	1.15E-7	4.52E-7	2.04E-5	5.20E-8	2.25E-6	2.39E-9	-9.07E-6	1.36E-5
EP-m	kg N eq	3.68E-4	1.29E-4	3.54E-5	5.32E-4	1.29E-5	7.95E-5	1.37E-6	-1.70E-4	4.56E-4
EP-T	mol N eq	4.05E-3	1.43E-3	3.83E-4	5.86E-3	1.42E-4	8.76E-4	7.23E-6	-1.82E-3	5.07E-3
POCP	kg NMVOC eq	1.51E-3	3.74E-4	1.73E-4	2.06E-3	4.06E-5	2.65E-4	2.53E-6	-6.51E-4	1.72E-3
ADP-mm	kg Sb eq	2.54E-4	2.82E-7	7.66E-7	2.55E-4	1.63E-7	1.27E-6	1.82E-9	-5.05E-6	2.51E-4
ADP-f	MJ	1.33E+1	2.88E-1	3.63E-1	1.40E+1	9.70E-2	8.99E-1	5.44E-3	-6.72E+0	8.27E+0
WDP	m3 depriv.	6.92E-1	5.87E-4	1.13E-2	7.04E-1	2.98E-4	3.32E-2	3.63E-5	-3.58E-1	3.79E-1
PM	disease inc.	1.74E-8	1.05E-9	1.18E-9	1.97E-8	5.70E-10	4.14E-9	3.74E-11	-6.40E-9	1.80E-8
IR	kBq U-235 eq	2.90E-2	1.24E-3	9.28E-4	3.12E-2	4.24E-4	3.09E-3	2.51E-5	-1.15E-2	2.33E-2
ETP-fw	CTUe	9.58E+0	2.03E-1	9.17E-1	1.07E+1	7.87E-2	6.10E+0	6.74E-2	-3.40E+0	1.35E+1
HTP-c	CTUh	3.30E-10	1.11E-11	3.60E-11	3.78E-10	2.80E-12	1.03E-10	1.49E-13	-1.30E-10	3.53E-10
HTP-nc	CTUh	1.03E-8	1.95E-10	2.11E-9	1.26E-8	9.39E-11	2.28E-9	1.35E-11	-4.48E-9	1.05E-8
SQP	Pt	1.67E+0	1.14E-1	1.21E-1	1.90E+0	8.30E-2	5.78E-1	1.39E-2	-6.34E-1	1.94E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.74E-1	2.73E-3	1.87E+0	2.45E+0	1.39E-3	6.22E-2	2.06E-4	-2.60E-1	2.25E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.74E-1	2.73E-3	1.87E+0	2.45E+0	1.39E-3	6.22E-2	2.06E-4	-2.60E-1	2.25E+0
PENRE	MJ	1.43E+1	3.05E-1	3.85E-1	1.50E+1	1.03E-1	9.57E-1	5.77E-3	-7.24E+0	8.81E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.43E+1	3.05E-1	3.85E-1	1.50E+1	1.03E-1	9.57E-1	5.77E-3	-7.24E+0	8.81E+0
PET	MJ	1.49E+1	3.08E-1	2.25E+0	1.74E+1	1.04E-1	1.02E+0	5.98E-3	-7.50E+0	1.11E+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	8.41E-3	2.13E-5	3.23E-4	8.75E-3	1.10E-5	9.26E-4	6.67E-6	-3.82E-3	5.88E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.60E-5	4.34E-7	3.59E-6	4.01E-5	2.48E-7	1.46E-6	6.62E-9	-4.98E-6	3.68E-5
NHWD	kg	4.19E-2	6.88E-3	7.29E-4	4.96E-2	6.01E-3	3.45E-2	2.40E-2	-1.89E-2	9.52E-2
RWD	kg	2.89E-5	1.99E-6	9.51E-7	3.18E-5	6.59E-7	3.37E-6	3.54E-8	-1.01E-5	2.58E-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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