

Environmental Profile

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

Ecochain v3.5.71



Product: 3066556 - PVC-U Soil Branch 87.5° BK 110 D/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



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	1.51E+0	6.56E-2	1.24E-1	1.70E+0	1.99E-2	5.50E-1	6.53E-3	-8.39E-1	1.43E+0
GWP-f	kg CO2 eq	1.50E+0	6.56E-2	1.20E-1	1.68E+0	1.99E-2	5.51E-1	6.53E-3	-8.33E-1	1.43E+0
GWP-b	kg CO2 eq	1.04E-2	-7.67E-6	3.36E-3	1.38E-2	1.21E-5	-5.17E-4	7.91E-6	-5.71E-3	7.55E-3
GWP-luluc	kg CO2 eq	1.19E-3	4.08E-5	9.76E-5	1.33E-3	7.05E-6	2.32E-4	1.66E-7	-5.23E-4	1.04E-3
ODP	kg CFC11 eq	7.73E-7	1.36E-8	1.13E-8	7.98E-7	4.59E-9	6.17E-8	2.35E-10	-4.01E-7	4.64E-7
AP	mol H+ eq	6.95E-3	1.77E-3	6.39E-4	9.37E-3	1.14E-4	1.08E-3	5.71E-6	-3.13E-3	7.43E-3
EP-fw	kg P eq	6.50E-5	3.24E-7	1.66E-6	6.70E-5	1.64E-7	7.69E-6	7.49E-9	-2.98E-5	4.51E-5
EP-m	kg N eq	1.16E-3	4.45E-4	1.30E-4	1.73E-3	4.06E-5	2.62E-4	3.90E-6	-5.41E-4	1.50E-3
EP-T	mol N eq	1.26E-2	4.94E-3	1.40E-3	1.90E-2	4.48E-4	2.89E-3	2.28E-5	-5.76E-3	1.66E-2
POCP	kg NMVOC eq	4.50E-3	1.29E-3	6.32E-4	6.42E-3	1.28E-4	8.68E-4	7.89E-6	-2.03E-3	5.39E-3
ADP-mm	kg Sb eq	8.21E-4	7.34E-7	2.81E-6	8.25E-4	5.15E-7	4.25E-6	5.73E-9	-1.65E-5	8.13E-4
ADP-f	MJ	4.00E+1	8.73E-1	1.33E+0	4.22E+1	3.06E-1	2.97E+0	1.71E-2	-2.07E+1	2.48E+1
WDP	m3 depriv.	2.35E+0	1.60E-3	4.12E-2	2.39E+0	9.39E-4	1.15E-1	1.15E-4	-1.17E+0	1.34E+0
PM	disease inc.	4.98E-8	2.81E-9	4.33E-9	5.69E-8	1.80E-9	1.35E-8	1.18E-10	-2.01E-8	5.23E-8
IR	kBq U-235 eq	8.73E-2	3.76E-3	3.40E-3	9.44E-2	1.34E-3	1.03E-2	7.89E-5	-3.76E-2	6.86E-2
ETP-fw	CTUe	3.10E+1	5.96E-1	3.37E+0	3.50E+1	2.48E-1	2.19E+1	2.42E-1	-1.12E+1	4.61E+1
HTP-c	CTUh	1.09E-9	3.55E-11	1.32E-10	1.26E-9	8.84E-12	3.34E-10	4.72E-13	-4.27E-10	1.18E-9
HTP-nc	CTUh	3.47E-8	5.42E-10	7.72E-9	4.30E-8	2.96E-10	7.81E-9	4.73E-11	-1.47E-8	3.64E-8
SQP	Pt	5.04E+0	2.66E-1	4.43E-1	5.75E+0	2.62E-1	1.86E+0	4.38E-2	-2.08E+0	5.84E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.83E+0	7.44E-3	6.87E+0	8.71E+0	4.39E-3	2.12E-1	6.41E-4	-8.50E-1	8.07E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.83E+0	7.44E-3	6.87E+0	8.71E+0	4.39E-3	2.12E-1	6.41E-4	-8.50E-1	8.07E+0
PENRE	MJ	4.28E+1	9.27E-1	1.41E+0	4.52E+1	3.25E-1	3.16E+0	1.82E-2	-2.22E+1	2.64E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.28E+1	9.27E-1	1.41E+0	4.52E+1	3.25E-1	3.16E+0	1.82E-2	-2.22E+1	2.64E+1
PET	MJ	4.47E+1	9.34E-1	8.28E+0	5.39E+1	3.29E-1	3.37E+0	1.88E-2	-2.31E+1	3.45E+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	2.68E-2	5.80E-5	1.18E-3	2.80E-2	3.46E-5	3.16E-3	2.10E-5	-1.23E-2	1.89E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.23E-4	1.13E-6	1.31E-5	1.37E-4	7.82E-7	4.80E-6	2.09E-8	-1.62E-5	1.27E-4
NHWD	kg	1.38E-1	1.43E-2	2.67E-3	1.55E-1	1.90E-2	1.10E-1	7.58E-2	-6.21E-2	2.98E-1
RWD	kg	8.19E-5	6.04E-6	3.47E-6	9.15E-5	2.08E-6	1.11E-5	1.12E-7	-3.31E-5	7.16E-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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