

Environmental Profile

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

Ecochain v3.5.71



Product: 3036784 - OsmaS PVCU Branch 90° WT 110x110 S/S
Unit: 1 piece
Manufacturer: Wavin - UK - Chippenham - Verified

The Wavin Osma soil range offers an exceptional choice of pipe & fittings including brackets, bends, junctions, access fittings, and terminations. To connect to your soil system, we offer push-fit & solvent weld waste ranges, together with trap, overflow & condensate ranges to cover all installation needs.

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	1.59E+0	2.23E-2	1.82E-1	1.79E+0	1.92E-2	5.48E-1	8.68E-3	-7.59E-1	1.61E+0
GWP-f	kg CO2 eq	1.53E+0	2.22E-2	1.78E-1	1.73E+0	1.91E-2	5.49E-1	8.69E-3	-7.53E-1	1.55E+0
GWP-b	kg CO2 eq	5.14E-2	1.34E-5	3.71E-3	5.51E-2	1.16E-5	-7.70E-4	6.44E-6	-5.60E-3	4.88E-2
GWP-luluc	kg CO2 eq	4.76E-3	7.90E-6	1.64E-4	4.93E-3	6.77E-6	1.07E-4	3.37E-7	-5.15E-4	4.53E-3
ODP	kg CFC11 eq	1.31E-7	5.12E-9	1.47E-8	1.51E-7	4.41E-9	1.40E-8	2.37E-10	-3.92E-7	-2.22E-7
AP	mol H+ eq	1.54E-2	1.30E-4	9.92E-4	1.65E-2	1.09E-4	5.73E-4	6.49E-6	-3.03E-3	1.42E-2
EP-fw	kg P eq	1.62E-4	1.82E-7	2.52E-6	1.65E-4	1.57E-7	3.10E-6	1.28E-8	-2.94E-5	1.39E-4
EP-m	kg N eq	3.05E-3	4.60E-5	1.85E-4	3.28E-3	3.90E-5	1.64E-4	2.56E-6	-5.16E-4	2.97E-3
EP-T	mol N eq	3.80E-2	5.07E-4	2.04E-3	4.05E-2	4.30E-4	1.79E-3	2.43E-5	-5.49E-3	3.73E-2
POCP	kg NMVOC eq	8.89E-3	1.45E-4	8.55E-4	9.89E-3	1.23E-4	5.69E-4	8.85E-6	-1.93E-3	8.66E-3
ADP-mm	kg Sb eq	3.24E-2	5.73E-7	4.74E-6	3.24E-2	4.95E-7	2.34E-6	8.02E-9	-1.63E-5	3.24E-2
ADP-f	MJ	2.45E+1	3.41E-1	1.97E+0	2.68E+1	2.94E-1	1.88E+0	1.80E-2	-1.91E+1	9.96E+0
WDP	m3 depriv.	1.66E+0	1.04E-3	5.73E-2	1.72E+0	9.01E-4	3.48E-2	7.29E-4	-1.15E+0	6.04E-1
PM	disease inc.	7.16E-8	2.00E-9	6.86E-9	8.05E-8	1.73E-9	9.56E-9	1.24E-10	-1.95E-8	7.24E-8
IR	kBq U-235 eq	1.51E-1	1.49E-3	4.56E-3	1.57E-1	1.28E-3	5.64E-3	7.18E-5	-3.69E-2	1.27E-1
ETP-fw	CTUe	3.11E+2	2.77E-1	5.45E+0	3.17E+2	2.39E-1	2.13E+0	1.57E-2	-1.10E+1	3.08E+2
HTP-c	CTUh	7.41E-9	9.87E-12	2.14E-10	7.63E-9	8.49E-12	6.16E-10	9.16E-13	-4.18E-10	7.84E-9
HTP-nc	CTUh	2.19E-7	3.29E-10	1.02E-8	2.29E-7	2.84E-10	4.06E-9	1.27E-11	-1.45E-8	2.19E-7
SQP	Pt	1.24E+1	2.91E-1	7.03E-1	1.34E+1	2.51E-1	1.50E+0	4.31E-2	-2.02E+0	1.32E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.11E+0	4.88E-3	1.17E+1	1.48E+1	4.21E-3	9.19E-2	3.42E-4	-8.36E-1	1.41E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.11E+0	4.88E-3	1.17E+1	1.48E+1	4.21E-3	9.19E-2	3.42E-4	-8.36E-1	1.41E+1
PENRE	MJ	2.61E+1	3.62E-1	2.09E+0	2.85E+1	3.12E-1	2.00E+0	1.91E-2	-2.05E+1	1.04E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.61E+1	3.62E-1	2.09E+0	2.85E+1	3.12E-1	2.00E+0	1.91E-2	-2.05E+1	1.04E+1
PET	MJ	2.92E+1	3.67E-1	1.38E+1	4.34E+1	3.16E-1	2.09E+0	1.95E-2	-2.13E+1	2.45E+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	4.84E-2	3.85E-5	1.71E-3	5.01E-2	3.32E-5	1.05E-3	1.91E-5	-1.21E-2	3.91E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.12E-3	8.69E-7	1.49E-5	4.14E-3	7.51E-7	3.39E-6	2.72E-8	-1.48E-5	4.13E-3
NHWD	kg	2.77E-1	2.10E-2	3.11E-3	3.01E-1	1.82E-2	9.57E-2	7.29E-2	-6.10E-2	4.27E-1
RWD	kg	1.14E-4	2.32E-6	3.95E-6	1.20E-4	2.00E-6	7.15E-6	1.09E-7	-3.23E-5	9.74E-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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