

Environmental Profile

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

Ecochain v3.5.71



Product: 3043047 - OsmaS PVCU Double Branch 90° WT 110x110
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	1.82E+0	2.70E-2	1.95E-1	2.04E+0	2.21E-2	6.26E-1	1.00E-2	-8.73E-1	1.82E+0
GWP-f	kg CO2 eq	1.75E+0	2.69E-2	1.91E-1	1.97E+0	2.20E-2	6.27E-1	1.00E-2	-8.66E-1	1.76E+0
GWP-b	kg CO2 eq	5.77E-2	1.62E-5	3.62E-3	6.13E-2	1.34E-5	-8.86E-4	7.46E-6	-6.42E-3	5.40E-2
GWP-luluc	kg CO2 eq	5.37E-3	9.58E-6	1.81E-4	5.56E-3	7.80E-6	1.24E-4	3.84E-7	-5.88E-4	5.11E-3
ODP	kg CFC11 eq	1.53E-7	6.20E-9	1.52E-8	1.75E-7	5.08E-9	1.61E-8	2.73E-10	-4.46E-7	-2.50E-7
AP	mol H+ eq	1.75E-2	1.58E-4	1.08E-3	1.87E-2	1.26E-4	6.59E-4	7.45E-6	-3.48E-3	1.60E-2
EP-fw	kg P eq	1.83E-4	2.21E-7	2.71E-6	1.86E-4	1.81E-7	3.57E-6	1.46E-8	-3.36E-5	1.56E-4
EP-m	kg N eq	3.45E-3	5.60E-5	1.97E-4	3.71E-3	4.49E-5	1.88E-4	3.07E-6	-5.93E-4	3.35E-3
EP-T	mol N eq	4.30E-2	6.17E-4	2.18E-3	4.58E-2	4.95E-4	2.06E-3	2.79E-5	-6.30E-3	4.20E-2
POCP	kg NMVOC eq	1.01E-2	1.76E-4	8.93E-4	1.12E-2	1.41E-4	6.54E-4	1.02E-5	-2.22E-3	9.78E-3
ADP-mm	kg Sb eq	3.65E-2	6.93E-7	5.24E-6	3.65E-2	5.70E-7	2.70E-6	9.17E-9	-1.87E-5	3.65E-2
ADP-f	MJ	2.88E+1	4.13E-1	2.11E+0	3.13E+1	3.38E-1	2.16E+0	2.07E-2	-2.20E+1	1.18E+1
WDP	m3 depriv.	1.89E+0	1.26E-3	6.03E-2	1.96E+0	1.04E-3	4.02E-2	8.22E-4	-1.32E+0	6.78E-1
PM	disease inc.	8.23E-8	2.42E-9	7.48E-9	9.22E-8	1.99E-9	1.10E-8	1.43E-10	-2.24E-8	8.29E-8
IR	kBq U-235 eq	1.73E-1	1.81E-3	4.76E-3	1.79E-1	1.48E-3	6.48E-3	8.29E-5	-4.21E-2	1.45E-1
ETP-fw	CTUe	3.50E+2	3.35E-1	5.96E+0	3.57E+2	2.75E-1	2.46E+0	1.83E-2	-1.25E+1	3.47E+2
HTP-c	CTUh	8.34E-9	1.20E-11	2.34E-10	8.59E-9	9.77E-12	6.98E-10	1.04E-12	-4.78E-10	8.82E-9
HTP-nc	CTUh	2.46E-7	3.99E-10	1.06E-8	2.57E-7	3.27E-10	4.64E-9	1.46E-11	-1.66E-8	2.46E-7
SQP	Pt	1.40E+1	3.52E-1	7.66E-1	1.52E+1	2.89E-1	1.72E+0	4.96E-2	-2.31E+0	1.49E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.53E+0	5.91E-3	1.30E+1	1.65E+1	4.85E-3	1.06E-1	4.04E-4	-9.56E-1	1.57E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.53E+0	5.91E-3	1.30E+1	1.65E+1	4.85E-3	1.06E-1	4.04E-4	-9.56E-1	1.57E+1
PENRE	MJ	3.06E+1	4.38E-1	2.24E+0	3.33E+1	3.59E-1	2.30E+0	2.20E-2	-2.37E+1	1.23E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.06E+1	4.38E-1	2.24E+0	3.33E+1	3.59E-1	2.30E+0	2.20E-2	-2.37E+1	1.23E+1
PET	MJ	3.42E+1	4.44E-1	1.52E+1	4.98E+1	3.64E-1	2.41E+0	2.24E-2	-2.46E+1	2.80E+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	5.49E-2	4.66E-5	1.82E-3	5.67E-2	3.83E-5	1.21E-3	2.20E-5	-1.38E-2	4.42E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.64E-3	1.05E-6	1.47E-5	4.65E-3	8.65E-7	3.89E-6	3.11E-8	-1.69E-5	4.64E-3
NHWD	kg	3.12E-1	2.55E-2	3.10E-3	3.40E-1	2.10E-2	1.10E-1	8.39E-2	-6.96E-2	4.85E-1
RWD	kg	1.32E-4	2.81E-6	3.90E-6	1.39E-4	2.30E-6	8.23E-6	1.25E-7	-3.69E-5	1.12E-4
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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