

Environmental Profile

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

Ecochain v3.5.71



Product: 3032489 - OsmaS PVCU Branch 90° GY 160x160 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	3.76E+0	1.62E-1	4.61E-1	4.39E+0	4.98E-2	1.37E+0	1.62E-2	-2.09E+0	3.73E+0
GWP-f	kg CO2 eq	3.73E+0	1.62E-1	4.51E-1	4.35E+0	4.98E-2	1.37E+0	1.62E-2	-2.08E+0	3.71E+0
GWP-b	kg CO2 eq	2.77E-2	-2.31E-5	9.35E-3	3.70E-2	3.02E-5	-1.41E-3	1.97E-5	-1.44E-2	2.13E-2
GWP-luluc	kg CO2 eq	3.03E-3	1.02E-4	4.16E-4	3.55E-3	1.76E-5	5.86E-4	4.18E-7	-1.32E-3	2.83E-3
ODP	kg CFC11 eq	1.94E-6	3.33E-8	3.72E-8	2.02E-6	1.15E-8	1.57E-7	5.87E-10	-1.02E-6	1.17E-6
AP	mol H+ eq	1.75E-2	4.50E-3	2.51E-3	2.45E-2	2.84E-4	2.72E-3	1.43E-5	-7.84E-3	1.97E-2
EP-fw	kg P eq	1.65E-4	7.80E-7	6.38E-6	1.72E-4	4.10E-7	1.95E-5	1.88E-8	-7.52E-5	1.17E-4
EP-m	kg N eq	2.91E-3	1.12E-3	4.69E-4	4.50E-3	1.01E-4	6.60E-4	9.48E-6	-1.36E-3	3.91E-3
EP-T	mol N eq	3.19E-2	1.25E-2	5.17E-3	4.96E-2	1.12E-3	7.27E-3	5.69E-5	-1.44E-2	4.36E-2
POCP	kg NMVOC eq	1.11E-2	3.25E-3	2.16E-3	1.65E-2	3.20E-4	2.18E-3	1.97E-5	-5.06E-3	1.40E-2
ADP-mm	kg Sb eq	2.05E-3	1.73E-6	1.20E-5	2.07E-3	1.29E-6	1.07E-5	1.44E-8	-4.18E-5	2.04E-3
ADP-f	MJ	9.73E+1	2.14E+0	4.99E+0	1.04E+2	7.64E-1	7.49E+0	4.28E-2	-5.12E+1	6.15E+1
WDP	m3 depriv.	5.97E+0	3.83E-3	1.45E-1	6.12E+0	2.34E-3	2.91E-1	3.00E-4	-2.95E+0	3.46E+0
PM	disease inc.	1.20E-7	6.67E-9	1.74E-8	1.44E-7	4.49E-9	3.40E-8	2.95E-10	-5.01E-8	1.33E-7
IR	kBq U-235 eq	2.11E-1	9.22E-3	1.15E-2	2.32E-1	3.34E-3	2.61E-2	1.97E-4	-9.48E-2	1.67E-1
ETP-fw	CTUe	7.86E+1	1.45E+0	1.38E+1	9.38E+1	6.20E-1	5.57E+1	6.18E-1	-2.83E+1	1.23E+2
HTP-c	CTUh	2.80E-9	8.82E-11	5.42E-10	3.43E-9	2.21E-11	8.48E-10	1.19E-12	-1.08E-9	3.22E-9
HTP-nc	CTUh	8.87E-8	1.30E-9	2.59E-8	1.16E-7	7.40E-10	1.98E-8	1.20E-10	-3.73E-8	9.92E-8
SQP	Pt	1.26E+1	6.04E-1	1.78E+0	1.50E+1	6.54E-1	4.67E+0	1.09E-1	-5.24E+0	1.52E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.61E+0	1.77E-2	2.97E+1	3.44E+1	1.10E-2	5.36E-1	1.59E-3	-2.14E+0	3.28E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.61E+0	1.77E-2	2.97E+1	3.44E+1	1.10E-2	5.36E-1	1.59E-3	-2.14E+0	3.28E+1
PENRE	MJ	1.04E+2	2.27E+0	5.30E+0	1.12E+2	8.11E-1	7.96E+0	4.55E-2	-5.52E+1	6.56E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.04E+2	2.27E+0	5.30E+0	1.12E+2	8.11E-1	7.96E+0	4.55E-2	-5.52E+1	6.56E+1
PET	MJ	1.09E+2	2.29E+0	3.50E+1	1.46E+2	8.22E-1	8.50E+0	4.71E-2	-5.73E+1	9.83E+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	6.78E-2	1.38E-4	4.33E-3	7.23E-2	8.65E-5	8.01E-3	5.24E-5	-3.10E-2	4.95E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.10E-4	2.67E-6	3.76E-5	3.51E-4	1.95E-6	1.21E-5	5.23E-8	-4.09E-5	3.24E-4
NHWD	kg	3.59E-1	3.10E-2	7.86E-3	3.98E-1	4.74E-2	2.76E-1	1.89E-1	-1.57E-1	7.54E-1
RWD	kg	1.92E-4	1.48E-5	9.97E-6	2.17E-4	5.20E-6	2.80E-5	2.79E-7	-8.36E-5	1.67E-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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