

Environmental Profile

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

Ecochain v3.5.71



Product: 3036203 - OsmaS PVCU Bossed Pipe WT 110x32 D/SW
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	6.89E-1	8.09E-3	7.21E-2	7.69E-1	8.17E-3	2.46E-1	3.73E-3	-3.26E-1	7.01E-1
GWP-f	kg CO2 eq	6.64E-1	8.08E-3	7.06E-2	7.42E-1	8.16E-3	2.46E-1	3.73E-3	-3.23E-1	6.77E-1
GWP-b	kg CO2 eq	2.32E-2	4.89E-6	1.41E-3	2.46E-2	4.96E-6	-3.26E-4	2.73E-6	-2.40E-3	2.19E-2
GWP-luluc	kg CO2 eq	2.13E-3	2.86E-6	6.58E-5	2.20E-3	2.89E-6	4.56E-5	1.49E-7	-2.22E-4	2.02E-3
ODP	kg CFC11 eq	5.39E-8	1.86E-9	5.75E-9	6.16E-8	1.88E-9	5.98E-9	1.02E-10	-1.70E-7	-1.01E-7
AP	mol H+ eq	6.85E-3	4.65E-5	3.95E-4	7.29E-3	4.65E-5	2.45E-4	2.81E-6	-1.29E-3	6.29E-3
EP-fw	kg P eq	7.22E-5	6.64E-8	1.00E-6	7.33E-5	6.72E-8	1.32E-6	5.63E-9	-1.27E-5	6.20E-5
EP-m	kg N eq	1.36E-3	1.66E-5	7.32E-5	1.45E-3	1.66E-5	7.01E-5	1.00E-6	-2.21E-4	1.31E-3
EP-T	mol N eq	1.69E-2	1.83E-4	8.07E-4	1.79E-2	1.83E-4	7.68E-4	1.05E-5	-2.35E-3	1.65E-2
POCP	kg NMVOC eq	3.90E-3	5.22E-5	3.35E-4	4.29E-3	5.24E-5	2.43E-4	3.81E-6	-8.21E-4	3.77E-3
ADP-mm	kg Sb eq	1.46E-2	2.09E-7	1.90E-6	1.46E-2	2.11E-7	9.96E-7	3.50E-9	-7.17E-6	1.46E-2
ADP-f	MJ	1.01E+1	1.24E-1	7.82E-1	1.10E+1	1.25E-1	7.98E-1	7.75E-3	-8.08E+0	3.82E+0
WDP	m3 depriv.	7.31E-1	3.80E-4	2.25E-2	7.54E-1	3.84E-4	1.48E-2	3.27E-4	-4.96E-1	2.74E-1
PM	disease inc.	3.10E-8	7.28E-10	2.74E-9	3.44E-8	7.37E-10	4.07E-9	5.36E-11	-8.28E-9	3.10E-8
IR	kBq U-235 eq	6.57E-2	5.42E-4	1.79E-3	6.80E-2	5.48E-4	2.40E-3	3.07E-5	-1.59E-2	5.51E-2
ETP-fw	CTUe	1.40E+2	1.01E-1	2.18E+0	1.42E+2	1.02E-1	9.13E-1	6.54E-3	-4.74E+0	1.38E+2
HTP-c	CTUh	3.33E-9	3.59E-12	8.55E-11	3.42E-9	3.62E-12	2.72E-10	4.03E-13	-1.80E-10	3.51E-9
HTP-nc	CTUh	9.81E-8	1.20E-10	4.00E-9	1.02E-7	1.21E-10	1.76E-9	5.49E-12	-6.27E-9	9.78E-8
SQP	Pt	5.47E+0	1.06E-1	2.81E-1	5.86E+0	1.07E-1	6.36E-1	1.85E-2	-8.75E-1	5.74E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.37E+0	1.78E-3	4.71E+0	6.09E+0	1.80E-3	3.91E-2	1.39E-4	-3.60E-1	5.77E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.37E+0	1.78E-3	4.71E+0	6.09E+0	1.80E-3	3.91E-2	1.39E-4	-3.60E-1	5.77E+0
PENRE	MJ	1.07E+1	1.32E-1	8.30E-1	1.17E+1	1.33E-1	8.51E-1	8.24E-3	-8.70E+0	3.96E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.07E+1	1.32E-1	8.30E-1	1.17E+1	1.33E-1	8.51E-1	8.24E-3	-8.70E+0	3.96E+0
PET	MJ	1.21E+1	1.33E-1	5.54E+0	1.78E+1	1.35E-1	8.90E-1	8.38E-3	-9.06E+0	9.73E+0
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	2.14E-2	1.40E-5	6.75E-4	2.21E-2	1.42E-5	4.51E-4	8.17E-6	-5.17E-3	1.74E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.85E-3	3.17E-7	5.70E-6	1.86E-3	3.20E-7	1.45E-6	1.18E-8	-6.47E-6	1.85E-3
NHWD	kg	1.25E-1	7.67E-3	1.20E-3	1.34E-1	7.76E-3	4.10E-2	3.13E-2	-2.63E-2	1.88E-1
RWD	kg	4.86E-5	8.43E-7	1.51E-6	5.09E-5	8.52E-7	3.04E-6	4.66E-8	-1.40E-5	4.09E-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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