

Environmental Profile

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

Ecochain v3.5.71



Product: 3036207 - OsmaS PVCU Bossed Pipe GY 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	6.03E-1	2.51E-2	7.26E-2	7.01E-1	7.85E-3	2.31E-1	2.51E-3	-3.35E-1	6.08E-1
GWP-f	kg CO2 eq	5.98E-1	2.51E-2	7.11E-2	6.95E-1	7.84E-3	2.31E-1	2.51E-3	-3.32E-1	6.04E-1
GWP-b	kg CO2 eq	4.61E-3	-4.93E-6	1.44E-3	6.05E-3	4.76E-6	-2.15E-4	3.11E-6	-2.26E-3	3.58E-3
GWP-luluc	kg CO2 eq	4.94E-4	1.63E-5	6.60E-5	5.77E-4	2.78E-6	9.48E-5	6.66E-8	-2.10E-4	4.64E-4
ODP	kg CFC11 eq	3.18E-7	5.12E-9	5.82E-9	3.29E-7	1.81E-9	2.58E-8	9.30E-11	-1.63E-7	1.94E-7
AP	mol H+ eq	2.80E-3	7.37E-4	3.97E-4	3.94E-3	4.47E-5	4.39E-4	2.26E-6	-1.24E-3	3.19E-3
EP-fw	kg P eq	2.68E-5	1.15E-7	1.01E-6	2.79E-5	6.46E-8	3.16E-6	2.99E-9	-1.20E-5	1.92E-5
EP-m	kg N eq	4.69E-4	1.83E-4	7.38E-5	7.26E-4	1.60E-5	1.06E-4	1.42E-6	-2.15E-4	6.35E-4
EP-T	mol N eq	5.15E-3	2.03E-3	8.14E-4	8.00E-3	1.76E-4	1.17E-3	9.02E-6	-2.28E-3	7.07E-3
POCP	kg NMVOC eq	1.76E-3	5.28E-4	3.39E-4	2.63E-3	5.04E-5	3.51E-4	3.11E-6	-7.97E-4	2.23E-3
ADP-mm	kg Sb eq	3.33E-4	2.40E-7	1.91E-6	3.35E-4	2.03E-7	1.73E-6	2.28E-9	-6.76E-6	3.31E-4
ADP-f	MJ	1.53E+1	3.28E-1	7.87E-1	1.64E+1	1.20E-1	1.20E+0	6.79E-3	-8.08E+0	9.65E+0
WDP	m3 depriv.	9.76E-1	5.51E-4	2.28E-2	9.99E-1	3.70E-4	4.76E-2	4.91E-5	-4.68E-1	5.79E-1
PM	disease inc.	1.87E-8	9.44E-10	2.75E-9	2.24E-8	7.08E-10	5.44E-9	4.67E-11	-7.86E-9	2.08E-8
IR	kBq U-235 eq	3.28E-2	1.41E-3	1.81E-3	3.60E-2	5.26E-4	4.21E-3	3.11E-5	-1.51E-2	2.57E-2
ETP-fw	CTUe	1.28E+1	2.19E-1	2.19E+0	1.52E+1	9.78E-2	9.23E+0	1.02E-1	-4.50E+0	2.01E+1
HTP-c	CTUh	4.55E-10	1.38E-11	8.58E-11	5.55E-10	3.48E-12	1.37E-10	1.90E-13	-1.72E-10	5.24E-10
HTP-nc	CTUh	1.45E-8	1.89E-10	4.05E-9	1.88E-8	1.17E-10	3.23E-9	1.98E-11	-5.93E-9	1.62E-8
SQP	Pt	1.99E+0	7.67E-2	2.82E-1	2.35E+0	1.03E-1	7.41E-1	1.73E-2	-8.36E-1	2.38E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.41E-1	2.55E-3	4.72E+0	5.47E+0	1.73E-3	8.69E-2	2.50E-4	-3.40E-1	5.21E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.41E-1	2.55E-3	4.72E+0	5.47E+0	1.73E-3	8.69E-2	2.50E-4	-3.40E-1	5.21E+0
PENRE	MJ	1.64E+1	3.48E-1	8.36E-1	1.76E+1	1.28E-1	1.28E+0	7.21E-3	-8.70E+0	1.03E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.64E+1	3.48E-1	8.36E-1	1.76E+1	1.28E-1	1.28E+0	7.21E-3	-8.70E+0	1.03E+1
PET	MJ	1.71E+1	3.51E-1	5.56E+0	2.30E+1	1.30E-1	1.36E+0	7.46E-3	-9.04E+0	1.55E+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	1.09E-2	1.98E-5	6.81E-4	1.16E-2	1.36E-5	1.31E-3	8.29E-6	-4.90E-3	8.05E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.14E-5	3.73E-7	5.82E-6	5.76E-5	3.08E-7	1.94E-6	8.31E-9	-6.64E-6	5.32E-5
NHWD	kg	5.88E-2	3.44E-3	1.22E-3	6.34E-2	7.46E-3	4.42E-2	3.00E-2	-2.49E-2	1.20E-1
RWD	kg	2.89E-5	2.27E-6	1.54E-6	3.28E-5	8.19E-7	4.49E-6	4.41E-8	-1.34E-5	2.48E-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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