

Environmental Profile

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

Ecochain v3.5.71



Product: 3036202 - OsmaS PVCU Bossed Pipe E 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	6.34E-1	5.77E-3	4.40E-2	6.84E-1	7.61E-3	2.21E-1	3.45E-3	-3.01E-1	6.14E-1
GWP-f	kg CO2 eq	6.10E-1	5.77E-3	4.26E-2	6.58E-1	7.61E-3	2.21E-1	3.45E-3	-2.99E-1	5.91E-1
GWP-b	kg CO2 eq	2.22E-2	3.50E-6	1.40E-3	2.36E-2	4.62E-6	-3.06E-4	2.51E-6	-2.27E-3	2.11E-2
GWP-luluc	kg CO2 eq	2.02E-3	2.04E-6	3.14E-5	2.05E-3	2.69E-6	4.27E-5	1.40E-7	-2.10E-4	1.89E-3
ODP	kg CFC11 eq	4.82E-8	1.33E-9	4.32E-9	5.39E-8	1.75E-9	5.58E-9	9.46E-11	-1.61E-7	-9.98E-8
AP	mol H+ eq	6.34E-3	3.29E-5	2.19E-4	6.59E-3	4.33E-5	2.28E-4	2.61E-6	-1.21E-3	5.65E-3
EP-fw	kg P eq	6.81E-5	4.75E-8	5.76E-7	6.88E-5	6.26E-8	1.23E-6	5.28E-9	-1.20E-5	5.81E-5
EP-m	kg N eq	1.27E-3	1.18E-5	4.71E-5	1.33E-3	1.55E-5	6.52E-5	8.81E-7	-2.07E-4	1.21E-3
EP-T	mol N eq	1.59E-2	1.30E-4	5.03E-4	1.65E-2	1.71E-4	7.14E-4	9.72E-6	-2.20E-3	1.52E-2
POCP	kg NMVOC eq	3.63E-3	3.70E-5	2.37E-4	3.90E-3	4.88E-5	2.26E-4	3.54E-6	-7.65E-4	3.42E-3
ADP-mm	kg Sb eq	1.39E-2	1.49E-7	9.00E-7	1.39E-2	1.97E-7	9.32E-7	3.27E-9	-6.65E-6	1.39E-2
ADP-f	MJ	8.97E+0	8.86E-2	4.70E-1	9.53E+0	1.17E-1	7.47E-1	7.19E-3	-7.47E+0	2.93E+0
WDP	m3 depriv.	6.79E-1	2.72E-4	1.52E-2	6.95E-1	3.58E-4	1.37E-2	3.10E-4	-4.69E-1	2.41E-1
PM	disease inc.	2.82E-8	5.21E-10	1.46E-9	3.02E-8	6.87E-10	3.80E-9	4.98E-11	-7.73E-9	2.70E-8
IR	kBq U-235 eq	6.14E-2	3.87E-4	1.28E-3	6.30E-2	5.10E-4	2.24E-3	2.83E-5	-1.50E-2	5.08E-2
ETP-fw	CTUe	1.33E+2	7.19E-2	1.12E+0	1.34E+2	9.48E-2	8.40E-1	5.96E-3	-4.48E+0	1.30E+2
HTP-c	CTUh	3.15E-9	2.56E-12	4.38E-11	3.20E-9	3.37E-12	2.57E-10	3.79E-13	-1.70E-10	3.29E-9
HTP-nc	CTUh	9.32E-8	8.57E-11	2.94E-9	9.62E-8	1.13E-10	1.65E-9	5.10E-12	-5.93E-9	9.21E-8
SQP	Pt	5.11E+0	7.58E-2	1.49E-1	5.33E+0	9.99E-2	5.95E-1	1.71E-2	-8.24E-1	5.22E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.28E+0	1.27E-3	2.17E+0	3.46E+0	1.68E-3	3.65E-2	1.25E-4	-3.40E-1	3.16E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.28E+0	1.27E-3	2.17E+0	3.46E+0	1.68E-3	3.65E-2	1.25E-4	-3.40E-1	3.16E+0
PENRE	MJ	9.54E+0	9.40E-2	4.99E-1	1.01E+1	1.24E-1	7.96E-1	7.65E-3	-8.03E+0	3.03E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.54E+0	9.40E-2	4.99E-1	1.01E+1	1.24E-1	7.96E-1	7.65E-3	-8.03E+0	3.03E+0
PET	MJ	1.08E+1	9.53E-2	2.67E+0	1.36E+1	1.26E-1	8.33E-1	7.77E-3	-8.37E+0	6.19E+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	2.00E-2	1.00E-5	4.27E-4	2.04E-2	1.32E-5	4.10E-4	7.55E-6	-4.87E-3	1.60E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.77E-3	2.26E-7	5.39E-6	1.77E-3	2.99E-7	1.36E-6	1.10E-8	-6.04E-6	1.77E-3
NHWD	kg	1.14E-1	5.49E-3	1.08E-3	1.21E-1	7.24E-3	3.83E-2	2.90E-2	-2.48E-2	1.70E-1
RWD	kg	4.47E-5	6.02E-7	1.43E-6	4.68E-5	7.94E-7	2.85E-6	4.31E-8	-1.32E-5	3.73E-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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