

Environmental Profile

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

Ecochain v3.5.71



Product: 3037706 - OsmaS PVCU Pipe WT 110 L=4 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	8.11E+0	3.73E-1	9.18E-1	9.40E+0	1.89E-1	6.38E+0	5.49E-2	-3.56E+0	1.25E+1
GWP-f	kg CO2 eq	8.96E+0	3.73E-1	8.80E-1	1.02E+1	1.89E-1	5.25E+0	5.48E-2	-3.54E+0	1.22E+1
GWP-b	kg CO2 eq	-8.61E-1	-2.14E-5	3.66E-2	-8.25E-1	1.15E-4	1.12E+0	7.01E-5	-1.81E-2	2.79E-1
GWP-luluc	kg CO2 eq	8.54E-3	2.24E-4	5.32E-4	9.29E-3	6.68E-5	2.26E-3	1.47E-6	-1.84E-3	9.78E-3
ODP	kg CFC11 eq	4.04E-6	7.78E-8	1.01E-7	4.22E-6	4.35E-8	6.12E-7	2.17E-9	-1.37E-6	3.50E-6
AP	mol H+ eq	5.44E-2	9.42E-3	4.25E-3	6.80E-2	1.08E-3	1.06E-2	5.22E-5	-1.09E-2	6.89E-2
EP-fw	kg P eq	4.42E-4	1.94E-6	1.15E-5	4.55E-4	1.55E-6	7.53E-5	6.64E-8	-9.69E-5	4.35E-4
EP-m	kg N eq	7.56E-3	2.38E-3	1.01E-3	1.10E-2	3.85E-4	2.59E-3	3.20E-5	-2.05E-3	1.19E-2
EP-T	mol N eq	8.14E-2	2.64E-2	1.06E-2	1.18E-1	4.24E-3	2.85E-2	2.09E-4	-2.27E-2	1.29E-1
POCP	kg NMVOC eq	2.76E-2	6.91E-3	5.40E-3	3.99E-2	1.21E-3	8.54E-3	7.12E-5	-7.48E-3	4.22E-2
ADP-mm	kg Sb eq	2.38E-3	4.62E-6	1.51E-5	2.40E-3	4.88E-6	4.14E-5	5.19E-8	-5.28E-5	2.40E-3
ADP-f	MJ	2.12E+2	5.02E+0	9.69E+0	2.27E+2	2.90E+0	2.89E+1	1.58E-1	-7.86E+1	1.80E+2
WDP	m3 depriv.	1.31E+1	9.81E-3	3.37E-1	1.34E+1	8.89E-3	1.13E+0	9.30E-4	-3.71E+0	1.08E+1
PM	disease inc.	3.81E-7	1.74E-8	2.74E-8	4.26E-7	1.70E-8	1.32E-7	1.08E-9	-7.26E-8	5.03E-7
IR	kBq U-235 eq	5.53E-1	2.17E-2	2.93E-2	6.04E-1	1.27E-2	1.01E-1	7.23E-4	-1.24E-1	5.94E-1
ETP-fw	CTUe	1.92E+2	3.49E+0	2.03E+1	2.15E+2	2.35E+0	2.17E+2	2.40E+0	-4.17E+1	3.96E+2
HTP-c	CTUh	8.39E-9	1.99E-10	7.97E-10	9.39E-9	8.37E-11	3.23E-9	4.17E-12	-1.48E-9	1.12E-8
HTP-nc	CTUh	2.06E-7	3.28E-9	6.80E-8	2.77E-7	2.81E-9	7.66E-8	4.60E-10	-4.92E-8	3.08E-7
SQP	Pt	1.39E+2	1.79E+0	2.80E+0	1.43E+2	2.48E+0	1.80E+1	4.01E-1	-2.88E+1	1.36E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.81E+1	4.56E-2	3.55E+1	6.37E+1	4.16E-2	2.07E+0	5.73E-3	-7.11E+0	5.87E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.81E+1	4.56E-2	3.55E+1	6.37E+1	4.16E-2	2.07E+0	5.73E-3	-7.11E+0	5.87E+1
PENRE	MJ	2.28E+2	5.33E+0	1.03E+1	2.43E+2	3.08E+0	3.07E+1	1.67E-1	-8.52E+1	1.92E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.28E+2	5.33E+0	1.03E+1	2.43E+2	3.08E+0	3.07E+1	1.67E-1	-8.52E+1	1.92E+2
PET	MJ	2.56E+2	5.38E+0	4.58E+1	3.07E+2	3.12E+0	3.28E+1	1.73E-1	-9.23E+1	2.51E+2
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	1.68E-1	3.56E-4	9.10E-3	1.78E-1	3.28E-4	3.10E-2	1.93E-4	-3.97E-2	1.70E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.44E-4	7.12E-6	1.39E-4	5.90E-4	7.41E-6	4.66E-5	1.91E-7	-7.15E-5	5.73E-4
NHWD	kg	1.51E+0	1.04E-1	2.75E-2	1.64E+0	1.80E-1	1.09E+0	7.19E-1	-2.10E-1	3.42E+0
RWD	kg	4.86E-4	3.47E-5	3.68E-5	5.58E-4	1.97E-5	1.08E-4	1.03E-6	-1.12E-4	5.74E-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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