

Environmental Profile

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

Ecochain v3.5.71



Product: 3037551 - OsmaS PVCU Pipe E 110 L=3 P/E
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	4.49E+0	2.67E-1	6.80E-1	5.44E+0	1.40E-1	4.60E+0	3.75E-2	-2.12E+0	8.10E+0
GWP-f	kg CO2 eq	5.42E+0	2.67E-1	6.53E-1	6.34E+0	1.40E-1	3.48E+0	3.75E-2	-2.11E+0	7.88E+0
GWP-b	kg CO2 eq	-9.32E-1	-3.02E-6	2.71E-2	-9.05E-1	8.49E-5	1.12E+0	4.89E-5	-1.07E-2	2.07E-1
GWP-luluc	kg CO2 eq	5.39E-3	1.56E-4	3.94E-4	5.94E-3	4.95E-5	1.63E-3	1.02E-6	-1.16E-3	6.47E-3
ODP	kg CFC11 eq	2.65E-6	5.61E-8	7.51E-8	2.78E-6	3.22E-8	4.35E-7	1.57E-9	-8.10E-7	2.44E-6
AP	mol H+ eq	2.77E-2	6.39E-3	3.15E-3	3.73E-2	7.97E-4	7.63E-3	3.73E-5	-6.64E-3	3.91E-2
EP-fw	kg P eq	2.70E-4	1.45E-6	8.53E-6	2.80E-4	1.15E-6	5.41E-5	4.61E-8	-5.79E-5	2.77E-4
EP-m	kg N eq	4.45E-3	1.62E-3	7.52E-4	6.82E-3	2.85E-4	1.87E-3	2.27E-5	-1.28E-3	7.73E-3
EP-T	mol N eq	4.85E-2	1.80E-2	7.88E-3	7.44E-2	3.14E-3	2.06E-2	1.50E-4	-1.44E-2	8.39E-2
POCP	kg NMVOC eq	1.60E-2	4.72E-3	4.00E-3	2.47E-2	8.98E-4	6.20E-3	5.06E-5	-4.59E-3	2.73E-2
ADP-mm	kg Sb eq	1.51E-4	3.56E-6	1.12E-5	1.65E-4	3.62E-6	3.00E-5	3.68E-8	-3.08E-5	1.68E-4
ADP-f	MJ	1.32E+2	3.63E+0	7.19E+0	1.43E+2	2.15E+0	2.10E+1	1.13E-1	-4.65E+1	1.19E+2
WDP	m3 depriv.	8.05E+0	7.41E-3	2.50E-1	8.31E+0	6.59E-3	8.05E-1	5.71E-4	-2.19E+0	6.94E+0
PM	disease inc.	2.37E-7	1.33E-8	2.03E-8	2.70E-7	1.26E-8	9.63E-8	7.75E-10	-4.65E-8	3.33E-7
IR	kBq U-235 eq	3.50E-1	1.57E-2	2.17E-2	3.88E-1	9.38E-3	7.31E-2	5.20E-4	-7.40E-2	3.97E-1
ETP-fw	CTUe	1.05E+2	2.56E+0	1.50E+1	1.22E+2	1.74E+0	1.53E+2	1.68E+0	-2.69E+1	2.52E+2
HTP-c	CTUh	4.27E-9	1.41E-10	5.91E-10	5.01E-9	6.20E-11	2.29E-9	2.87E-12	-8.97E-10	6.46E-9
HTP-nc	CTUh	1.16E-7	2.46E-9	5.04E-8	1.69E-7	2.08E-9	5.46E-8	3.23E-10	-2.98E-8	1.97E-7
SQP	Pt	1.23E+2	1.44E+0	2.08E+0	1.26E+2	1.84E+0	1.32E+1	2.87E-1	-2.60E+1	1.16E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.31E+1	3.44E-2	2.63E+1	4.95E+1	3.08E-2	1.49E+0	4.05E-3	-6.00E+0	4.50E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.31E+1	3.44E-2	2.63E+1	4.95E+1	3.08E-2	1.49E+0	4.05E-3	-6.00E+0	4.50E+1
PENRE	MJ	1.41E+2	3.85E+0	7.63E+0	1.53E+2	2.28E+0	2.23E+1	1.20E-1	-5.04E+1	1.27E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.41E+2	3.85E+0	7.63E+0	1.53E+2	2.28E+0	2.23E+1	1.20E-1	-5.04E+1	1.27E+2
PET	MJ	1.64E+2	3.89E+0	3.40E+1	2.02E+2	2.31E+0	2.38E+1	1.24E-1	-5.64E+1	1.72E+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	9.65E-2	2.69E-4	6.74E-3	1.03E-1	2.43E-4	2.21E-2	1.39E-4	-2.36E-2	1.02E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.12E-4	5.47E-6	1.03E-4	2.21E-4	5.49E-6	3.38E-5	1.36E-7	-4.27E-5	2.18E-4
NHWD	kg	7.16E-1	8.67E-2	2.04E-2	8.23E-1	1.33E-1	7.93E-1	5.32E-1	-1.27E-1	2.15E+0
RWD	kg	3.06E-4	2.50E-5	2.73E-5	3.59E-4	1.46E-5	7.89E-5	7.43E-7	-6.71E-5	3.86E-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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