

Environmental Profile

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

Ecochain v3.5.71



Product: 3040903 - OsmaS PVCU Bend 87.5° GY 110 D/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	1.03E+0	4.40E-2	1.21E-1	1.19E+0	1.35E-2	3.79E-1	4.42E-3	-5.71E-1	1.02E+0
GWP-f	kg CO2 eq	1.02E+0	4.40E-2	1.19E-1	1.18E+0	1.34E-2	3.80E-1	4.42E-3	-5.67E-1	1.01E+0
GWP-b	kg CO2 eq	6.83E-3	-5.04E-6	2.45E-3	9.28E-3	8.17E-6	-3.86E-4	5.33E-6	-3.85E-3	5.05E-3
GWP-luluc	kg CO2 eq	8.20E-4	2.73E-5	1.10E-4	9.57E-4	4.76E-6	1.56E-4	1.13E-7	-3.53E-4	7.64E-4
ODP	kg CFC11 eq	5.14E-7	9.11E-9	9.78E-9	5.33E-7	3.10E-9	4.14E-8	1.58E-10	-2.71E-7	3.06E-7
AP	mol H+ eq	4.79E-3	1.19E-3	6.63E-4	6.64E-3	7.66E-5	7.25E-4	3.86E-6	-2.12E-3	5.33E-3
EP-fw	kg P eq	4.45E-5	2.18E-7	1.68E-6	4.64E-5	1.11E-7	5.16E-6	5.09E-9	-2.01E-5	3.15E-5
EP-m	kg N eq	7.93E-4	2.98E-4	1.24E-4	1.21E-3	2.74E-5	1.77E-4	2.62E-6	-3.67E-4	1.05E-3
EP-T	mol N eq	8.73E-3	3.31E-3	1.36E-3	1.34E-2	3.02E-4	1.95E-3	1.54E-5	-3.90E-3	1.18E-2
POCP	kg NMVOC eq	3.08E-3	8.62E-4	5.69E-4	4.51E-3	8.64E-5	5.86E-4	5.33E-6	-1.38E-3	3.81E-3
ADP-mm	kg Sb eq	5.58E-4	4.95E-7	3.17E-6	5.62E-4	3.48E-7	2.86E-6	3.88E-9	-1.12E-5	5.54E-4
ADP-f	MJ	2.68E+1	5.86E-1	1.32E+0	2.87E+1	2.06E-1	2.00E+0	1.16E-2	-1.40E+1	1.69E+1
WDP	m3 depriv.	1.59E+0	1.08E-3	3.82E-2	1.63E+0	6.34E-4	7.71E-2	8.15E-5	-7.91E-1	9.19E-1
PM	disease inc.	3.35E-8	1.89E-9	4.59E-9	4.00E-8	1.21E-9	9.13E-9	7.96E-11	-1.36E-8	3.69E-8
IR	kBq U-235 eq	5.77E-2	2.53E-3	3.04E-3	6.32E-2	9.02E-4	6.96E-3	5.32E-5	-2.54E-2	4.58E-2
ETP-fw	CTUe	2.13E+1	4.01E-1	3.64E+0	2.53E+1	1.68E-1	1.46E+1	1.62E-1	-7.56E+0	3.27E+1
HTP-c	CTUh	7.52E-10	2.38E-11	1.43E-10	9.19E-10	5.97E-12	2.29E-10	3.21E-13	-2.89E-10	8.65E-10
HTP-nc	CTUh	2.37E-8	3.65E-10	6.80E-9	3.09E-8	2.00E-10	5.26E-9	3.17E-11	-9.96E-9	2.64E-8
SQP	Pt	3.47E+0	1.80E-1	4.70E-1	4.12E+0	1.77E-1	1.26E+0	2.96E-2	-1.40E+0	4.18E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.25E+0	5.01E-3	7.85E+0	9.11E+0	2.96E-3	1.42E-1	4.31E-4	-5.73E-1	8.68E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.25E+0	5.01E-3	7.85E+0	9.11E+0	2.96E-3	1.42E-1	4.31E-4	-5.73E-1	8.68E+0
PENRE	MJ	2.88E+1	6.22E-1	1.40E+0	3.08E+1	2.19E-1	2.13E+0	1.23E-2	-1.51E+1	1.80E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.88E+1	6.22E-1	1.40E+0	3.08E+1	2.19E-1	2.13E+0	1.23E-2	-1.51E+1	1.80E+1
PET	MJ	3.00E+1	6.27E-1	9.25E+0	3.99E+1	2.22E-1	2.27E+0	1.27E-2	-1.57E+1	2.67E+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	1.84E-2	3.90E-5	1.14E-3	1.96E-2	2.34E-5	2.12E-3	1.42E-5	-8.32E-3	1.35E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.35E-5	7.65E-7	9.85E-6	9.41E-5	5.28E-7	3.24E-6	1.41E-8	-1.10E-5	8.68E-5
NHWD	kg	9.68E-2	9.70E-3	2.06E-3	1.09E-1	1.28E-2	7.49E-2	5.12E-2	-4.19E-2	2.05E-1
RWD	kg	5.31E-5	4.05E-6	2.61E-6	5.97E-5	1.40E-6	7.49E-6	7.53E-8	-2.24E-5	4.63E-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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