

Environmental Profile

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

Ecochain v3.5.71



Product: 3036528 - OsmaS PVCU Bend 90° BK 110 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	9.87E-1	4.23E-2	7.40E-2	1.10E+0	1.31E-2	3.63E-1	4.09E-3	-5.51E-1	9.33E-1
GWP-f	kg CO2 eq	9.78E-1	4.23E-2	7.16E-2	1.09E+0	1.31E-2	3.64E-1	4.09E-3	-5.47E-1	9.26E-1
GWP-b	kg CO2 eq	8.36E-3	-9.00E-6	2.35E-3	1.07E-2	7.94E-6	-3.58E-4	5.15E-6	-3.83E-3	6.52E-3
GWP-luluc	kg CO2 eq	8.11E-4	2.78E-5	5.27E-5	8.91E-4	4.63E-6	1.61E-4	1.09E-7	-3.55E-4	7.02E-4
ODP	kg CFC11 eq	5.45E-7	8.61E-9	7.26E-9	5.61E-7	3.01E-9	4.41E-8	1.54E-10	-2.76E-7	3.33E-7
AP	mol H+ eq	4.53E-3	1.26E-3	3.68E-4	6.16E-3	7.45E-5	7.42E-4	3.74E-6	-2.07E-3	4.90E-3
EP-fw	kg P eq	4.44E-5	1.91E-7	9.67E-7	4.56E-5	1.08E-7	5.39E-6	4.91E-9	-2.02E-5	3.08E-5
EP-m	kg N eq	7.64E-4	3.13E-4	7.91E-5	1.16E-3	2.67E-5	1.79E-4	2.30E-6	-3.59E-4	1.01E-3
EP-T	mol N eq	8.30E-3	3.48E-3	8.45E-4	1.26E-2	2.94E-4	1.97E-3	1.49E-5	-3.81E-3	1.11E-2
POCP	kg NMVOC eq	2.83E-3	9.04E-4	3.99E-4	4.14E-3	8.40E-5	5.91E-4	5.13E-6	-1.32E-3	3.49E-3
ADP-mm	kg Sb eq	5.78E-4	3.92E-7	1.51E-6	5.80E-4	3.38E-7	2.93E-6	3.76E-9	-1.12E-5	5.72E-4
ADP-f	MJ	2.52E+1	5.51E-1	7.89E-1	2.65E+1	2.01E-1	2.03E+0	1.12E-2	-1.33E+1	1.55E+1
WDP	m3 depriv.	1.64E+0	9.08E-4	2.56E-2	1.66E+0	6.16E-4	8.11E-2	7.70E-5	-7.91E-1	9.55E-1
PM	disease inc.	3.01E-8	1.55E-9	2.45E-9	3.41E-8	1.18E-9	9.17E-9	7.73E-11	-1.31E-8	3.14E-8
IR	kBq U-235 eq	5.51E-2	2.37E-3	2.15E-3	5.96E-2	8.78E-4	7.13E-3	5.15E-5	-2.55E-2	4.22E-2
ETP-fw	CTUe	2.11E+1	3.66E-1	1.87E+0	2.34E+1	1.63E-1	1.58E+1	1.75E-1	-7.61E+0	3.19E+1
HTP-c	CTUh	7.54E-10	2.35E-11	7.36E-11	8.51E-10	5.80E-12	2.28E-10	3.12E-13	-2.90E-10	7.95E-10
HTP-nc	CTUh	2.43E-8	3.13E-10	4.93E-9	2.95E-8	1.94E-10	5.48E-9	3.37E-11	-1.00E-8	2.52E-8
SQP	Pt	3.21E+0	1.21E-1	2.51E-1	3.58E+0	1.72E-1	1.25E+0	2.87E-2	-1.41E+0	3.62E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.23E+0	4.20E-3	3.65E+0	4.88E+0	2.88E-3	1.48E-1	4.14E-4	-5.74E-1	4.46E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.23E+0	4.20E-3	3.65E+0	4.88E+0	2.88E-3	1.48E-1	4.14E-4	-5.74E-1	4.46E+0
PENRE	MJ	2.70E+1	5.85E-1	8.38E-1	2.85E+1	2.13E-1	2.16E+0	1.19E-2	-1.43E+1	1.65E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.70E+1	5.85E-1	8.38E-1	2.85E+1	2.13E-1	2.16E+0	1.19E-2	-1.43E+1	1.65E+1
PET	MJ	2.83E+1	5.90E-1	4.49E+0	3.33E+1	2.16E-1	2.31E+0	1.23E-2	-1.49E+1	2.10E+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	1.78E-2	3.26E-5	7.17E-4	1.86E-2	2.27E-5	2.21E-3	1.37E-5	-8.25E-3	1.26E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.95E-5	6.09E-7	9.06E-6	9.92E-5	5.14E-7	3.27E-6	1.37E-8	-1.10E-5	9.19E-5
NHWD	kg	9.46E-2	5.11E-3	1.82E-3	1.02E-1	1.24E-2	7.37E-2	4.98E-2	-4.21E-2	1.95E-1
RWD	kg	4.88E-5	3.83E-6	2.40E-6	5.50E-5	1.37E-6	7.59E-6	7.31E-8	-2.25E-5	4.16E-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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