

Environmental Profile

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

Ecochain v3.5.71



Product: 3036325 - OsmaS PVCU Bend 45° WT 110 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	8.33E-1	1.15E-2	8.23E-2	9.27E-1	9.98E-3	2.90E-1	4.53E-3	-3.98E-1	8.33E-1
GWP-f	kg CO2 eq	8.04E-1	1.15E-2	8.05E-2	8.96E-1	9.98E-3	2.90E-1	4.53E-3	-3.95E-1	8.05E-1
GWP-b	kg CO2 eq	2.68E-2	6.95E-6	1.75E-3	2.85E-2	6.06E-6	-4.01E-4	3.36E-6	-2.92E-3	2.52E-2
GWP-luluc	kg CO2 eq	2.49E-3	4.10E-6	7.28E-5	2.57E-3	3.53E-6	5.61E-5	1.76E-7	-2.69E-4	2.36E-3
ODP	kg CFC11 eq	6.82E-8	2.66E-9	6.78E-9	7.77E-8	2.30E-9	7.32E-9	1.24E-10	-2.05E-7	-1.17E-7
AP	mol H+ eq	8.10E-3	6.73E-5	4.45E-4	8.61E-3	5.68E-5	2.99E-4	3.39E-6	-1.58E-3	7.39E-3
EP-fw	kg P eq	8.48E-5	9.46E-8	1.13E-6	8.61E-5	8.21E-8	1.62E-6	6.71E-9	-1.53E-5	7.24E-5
EP-m	kg N eq	1.60E-3	2.39E-5	8.42E-5	1.71E-3	2.03E-5	8.56E-5	1.33E-6	-2.70E-4	1.54E-3
EP-T	mol N eq	1.99E-2	2.63E-4	9.24E-4	2.11E-2	2.24E-4	9.38E-4	1.27E-5	-2.87E-3	1.94E-2
POCP	kg NMVOC eq	4.66E-3	7.50E-5	3.91E-4	5.13E-3	6.41E-5	2.97E-4	4.62E-6	-1.01E-3	4.49E-3
ADP-mm	kg Sb eq	1.69E-2	2.97E-7	2.10E-6	1.69E-2	2.58E-7	1.22E-6	4.19E-9	-8.53E-6	1.69E-2
ADP-f	MJ	1.29E+1	1.77E-1	8.91E-1	1.39E+1	1.53E-1	9.80E-1	9.38E-3	-9.97E+0	5.11E+0
WDP	m3 depriv.	8.73E-1	5.42E-4	2.61E-2	9.00E-1	4.70E-4	1.81E-2	3.81E-4	-6.02E-1	3.17E-1
PM	disease inc.	3.76E-8	1.04E-9	3.07E-9	4.17E-8	9.01E-10	4.99E-9	6.49E-11	-1.02E-8	3.75E-8
IR	kBq U-235 eq	7.89E-2	7.73E-4	2.09E-3	8.18E-2	6.69E-4	2.94E-3	3.74E-5	-1.92E-2	6.62E-2
ETP-fw	CTUe	1.63E+2	1.43E-1	2.43E+0	1.65E+2	1.24E-1	1.11E+0	8.16E-3	-5.73E+0	1.61E+2
HTP-c	CTUh	3.88E-9	5.12E-12	9.54E-11	3.98E-9	4.43E-12	3.22E-10	4.78E-13	-2.18E-10	4.09E-9
HTP-nc	CTUh	1.14E-7	1.71E-10	4.70E-9	1.19E-7	1.48E-10	2.12E-9	6.64E-12	-7.59E-9	1.14E-7
SQP	Pt	6.49E+0	1.51E-1	3.15E-1	6.96E+0	1.31E-1	7.81E-1	2.25E-2	-1.06E+0	6.83E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.63E+0	2.53E-3	5.19E+0	6.83E+0	2.20E-3	4.80E-2	1.78E-4	-4.36E-1	6.44E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.63E+0	2.53E-3	5.19E+0	6.83E+0	2.20E-3	4.80E-2	1.78E-4	-4.36E-1	6.44E+0
PENRE	MJ	1.37E+1	1.88E-1	9.45E-1	1.48E+1	1.63E-1	1.04E+0	9.97E-3	-1.07E+1	5.33E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.37E+1	1.88E-1	9.45E-1	1.48E+1	1.63E-1	1.04E+0	9.97E-3	-1.07E+1	5.33E+0
PET	MJ	1.53E+1	1.90E-1	6.14E+0	2.17E+1	1.65E-1	1.09E+0	1.01E-2	-1.12E+1	1.18E+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	2.54E-2	2.00E-5	7.75E-4	2.62E-2	1.73E-5	5.47E-4	9.96E-6	-6.30E-3	2.04E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.15E-3	4.51E-7	7.02E-6	2.16E-3	3.92E-7	1.77E-6	1.42E-8	-7.77E-6	2.16E-3
NHWD	kg	1.47E-1	1.09E-2	1.46E-3	1.59E-1	9.49E-3	5.01E-2	3.80E-2	-3.18E-2	2.25E-1
RWD	kg	5.96E-5	1.20E-6	1.86E-6	6.27E-5	1.04E-6	3.73E-6	5.66E-8	-1.69E-5	5.06E-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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