

Environmental Profile

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

Ecochain v3.5.71



Product: 3036574 - OsmaS PVCU Bend 90° 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	1.06E+0	1.42E-2	1.26E-1	1.20E+0	1.28E-2	3.68E-1	5.81E-3	-5.08E-1	1.08E+0
GWP-f	kg CO2 eq	1.03E+0	1.42E-2	1.23E-1	1.16E+0	1.28E-2	3.69E-1	5.81E-3	-5.04E-1	1.05E+0
GWP-b	kg CO2 eq	3.51E-2	8.58E-6	2.46E-3	3.75E-2	7.77E-6	-5.15E-4	4.29E-6	-3.76E-3	3.33E-2
GWP-luluc	kg CO2 eq	3.24E-3	5.04E-6	1.15E-4	3.36E-3	4.53E-6	7.19E-5	2.28E-7	-3.46E-4	3.09E-3
ODP	kg CFC11 eq	8.60E-8	3.27E-9	1.00E-8	9.93E-8	2.95E-9	9.38E-9	1.59E-10	-2.64E-7	-1.52E-7
AP	mol H+ eq	1.04E-2	8.25E-5	6.92E-4	1.12E-2	7.29E-5	3.83E-4	4.35E-6	-2.03E-3	9.64E-3
EP-fw	kg P eq	1.10E-4	1.17E-7	1.75E-6	1.12E-4	1.05E-7	2.07E-6	8.66E-9	-1.98E-5	9.42E-5
EP-m	kg N eq	2.07E-3	2.93E-5	1.28E-4	2.23E-3	2.61E-5	1.10E-4	1.66E-6	-3.46E-4	2.02E-3
EP-T	mol N eq	2.58E-2	3.23E-4	1.41E-3	2.75E-2	2.87E-4	1.20E-3	1.63E-5	-3.68E-3	2.53E-2
POCP	kg NMVOC eq	5.99E-3	9.22E-5	5.86E-4	6.67E-3	8.21E-5	3.80E-4	5.93E-6	-1.29E-3	5.85E-3
ADP-mm	kg Sb eq	2.21E-2	3.66E-7	3.34E-6	2.21E-2	3.31E-7	1.57E-6	5.40E-9	-1.10E-5	2.21E-2
ADP-f	MJ	1.61E+1	2.18E-1	1.37E+0	1.77E+1	1.96E-1	1.26E+0	1.20E-2	-1.27E+1	6.45E+0
WDP	m3 depriv.	1.12E+0	6.68E-4	3.94E-2	1.16E+0	6.03E-4	2.32E-2	4.96E-4	-7.75E-1	4.11E-1
PM	disease inc.	4.79E-8	1.28E-9	4.80E-9	5.40E-8	1.15E-9	6.39E-9	8.33E-11	-1.30E-8	4.86E-8
IR	kBq U-235 eq	1.02E-1	9.53E-4	3.12E-3	1.06E-1	8.58E-4	3.77E-3	4.79E-5	-2.48E-2	8.55E-2
ETP-fw	CTUe	2.12E+2	1.77E-1	3.82E+0	2.16E+2	1.59E-1	1.42E+0	1.04E-2	-7.39E+0	2.10E+2
HTP-c	CTUh	5.04E-9	6.31E-12	1.50E-10	5.20E-9	5.67E-12	4.17E-10	6.19E-13	-2.81E-10	5.34E-9
HTP-nc	CTUh	1.49E-7	2.11E-10	6.98E-9	1.56E-7	1.90E-10	2.73E-9	8.53E-12	-9.78E-9	1.49E-7
SQP	Pt	8.38E+0	1.86E-1	4.92E-1	9.06E+0	1.68E-1	1.00E+0	2.88E-2	-1.36E+0	8.89E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.10E+0	3.12E-3	8.26E+0	1.04E+1	2.82E-3	6.15E-2	2.24E-4	-5.62E-1	9.87E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.10E+0	3.12E-3	8.26E+0	1.04E+1	2.82E-3	6.15E-2	2.24E-4	-5.62E-1	9.87E+0
PENRE	MJ	1.71E+1	2.31E-1	1.45E+0	1.88E+1	2.08E-1	1.34E+0	1.28E-2	-1.37E+1	6.72E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.71E+1	2.31E-1	1.45E+0	1.88E+1	2.08E-1	1.34E+0	1.28E-2	-1.37E+1	6.72E+0
PET	MJ	1.92E+1	2.35E-1	9.71E+0	2.92E+1	2.11E-1	1.40E+0	1.30E-2	-1.42E+1	1.66E+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	3.27E-2	2.46E-5	1.18E-3	3.39E-2	2.22E-5	6.98E-4	1.28E-5	-8.10E-3	2.66E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.81E-3	5.56E-7	9.93E-6	2.82E-3	5.02E-7	2.27E-6	1.83E-8	-9.97E-6	2.81E-3
NHWD	kg	1.89E-1	1.35E-2	2.08E-3	2.05E-1	1.22E-2	6.41E-2	4.87E-2	-4.10E-2	2.88E-1
RWD	kg	7.61E-5	1.48E-6	2.63E-6	8.03E-5	1.34E-6	4.78E-6	7.26E-8	-2.18E-5	6.47E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777