

Environmental Profile

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

Ecochain v3.5.71



Product: 3043020 - OsmaS PVCU Clip Boss BK 110x40
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	2.13E-1	7.87E-3	2.30E-2	2.44E-1	2.53E-3	9.80E-2	9.00E-4	-1.15E-1	2.30E-1
GWP-f	kg CO2 eq	2.12E-1	7.86E-3	2.26E-2	2.42E-1	2.53E-3	9.81E-2	9.00E-4	-1.14E-1	2.30E-1
GWP-b	kg CO2 eq	8.16E-4	-9.11E-7	4.51E-4	1.27E-3	1.54E-6	-6.72E-5	1.06E-6	-6.61E-4	5.41E-4
GWP-luluc	kg CO2 eq	1.64E-4	4.89E-6	2.10E-5	1.90E-4	8.96E-7	2.80E-5	2.25E-8	-6.21E-5	1.57E-4
ODP	kg CFC11 eq	9.77E-8	1.63E-9	1.84E-9	1.01E-7	5.83E-10	7.47E-9	3.13E-11	-4.78E-8	6.14E-8
AP	mol H+ eq	9.98E-4	2.13E-4	1.26E-4	1.34E-3	1.44E-5	1.34E-4	7.63E-7	-3.87E-4	1.10E-3
EP-fw	kg P eq	8.64E-6	3.89E-8	3.20E-7	9.00E-6	2.08E-8	9.31E-7	1.01E-9	-3.52E-6	6.43E-6
EP-m	kg N eq	1.66E-4	5.32E-5	2.34E-5	2.43E-4	5.16E-6	3.34E-5	5.65E-7	-6.82E-5	2.14E-4
EP-T	mol N eq	1.83E-3	5.92E-4	2.58E-4	2.68E-3	5.68E-5	3.69E-4	3.04E-6	-7.29E-4	2.37E-3
POCP	kg NMVOC eq	6.72E-4	1.54E-4	1.07E-4	9.33E-4	1.62E-5	1.10E-4	1.06E-6	-2.60E-4	8.00E-4
ADP-mm	kg Sb eq	1.11E-4	8.82E-8	6.08E-7	1.12E-4	6.55E-8	5.17E-7	7.68E-10	-2.29E-6	1.10E-4
ADP-f	MJ	5.73E+0	1.05E-1	2.50E-1	6.08E+0	3.88E-2	3.63E-1	2.29E-3	-2.76E+0	3.72E+0
WDP	m3 depriv.	3.00E-1	1.92E-4	7.21E-3	3.08E-1	1.19E-4	1.41E-2	1.62E-5	-1.38E-1	1.84E-1
PM	disease inc.	7.95E-9	3.38E-10	8.76E-10	9.16E-9	2.28E-10	1.66E-9	1.57E-11	-2.50E-9	8.57E-9
IR	kBq U-235 eq	1.23E-2	4.51E-4	5.71E-4	1.33E-2	1.70E-4	1.26E-3	1.05E-5	-4.54E-3	1.02E-2
ETP-fw	CTUe	4.32E+0	7.15E-2	6.97E-1	5.09E+0	3.15E-2	2.66E+0	2.93E-2	-1.34E+0	6.47E+0
HTP-c	CTUh	1.45E-10	4.26E-12	2.73E-11	1.77E-10	1.12E-12	4.24E-11	6.34E-14	-5.12E-11	1.69E-10
HTP-nc	CTUh	4.52E-9	6.50E-11	1.28E-9	5.86E-9	3.76E-11	9.65E-10	5.82E-12	-1.74E-9	5.13E-9
SQP	Pt	7.46E-1	3.20E-2	8.97E-2	8.67E-1	3.32E-2	2.28E-1	5.84E-3	-2.54E-1	8.80E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.46E-1	8.93E-4	1.51E+0	1.75E+0	5.57E-4	2.57E-2	8.60E-5	-1.01E-1	1.68E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.46E-1	8.93E-4	1.51E+0	1.75E+0	5.57E-4	2.57E-2	8.60E-5	-1.01E-1	1.68E+0
PENRE	MJ	6.14E+0	1.11E-1	2.65E-1	6.51E+0	4.12E-2	3.86E-1	2.43E-3	-2.98E+0	3.96E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.14E+0	1.11E-1	2.65E-1	6.51E+0	4.12E-2	3.86E-1	2.43E-3	-2.98E+0	3.96E+0
PET	MJ	6.38E+0	1.12E-1	1.77E+0	8.27E+0	4.18E-2	4.12E-1	2.51E-3	-3.08E+0	5.64E+0
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	3.63E-3	6.96E-6	2.16E-4	3.86E-3	4.40E-6	4.12E-4	2.80E-6	-1.48E-3	2.79E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.60E-5	1.36E-7	1.82E-6	1.79E-5	9.93E-8	6.04E-7	2.79E-9	-2.18E-6	1.64E-5
NHWD	kg	1.93E-2	1.72E-3	3.82E-4	2.14E-2	2.41E-3	1.42E-2	1.01E-2	-7.39E-3	4.08E-2
RWD	kg	1.23E-5	7.24E-7	4.83E-7	1.35E-5	2.64E-7	1.36E-6	1.49E-8	-4.07E-6	1.11E-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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