

Environmental Profile

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

Ecochain v3.5.71



Product: 3036263 - OsmaS PVCU Short Boss BK 110 D/SW
 Unit: 1 piece
 Manufacturer: Wavin - UK - Chippenham - Verified

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



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.

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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
 A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
 B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
 C4 Disposal

Benefits and loads beyond the system boundaries

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	5.78E-1	2.46E-2	4.47E-2	6.47E-1	7.61E-3	2.15E-1	2.38E-3	-3.22E-1	5.49E-1
GWP-f	kg CO2 eq	5.72E-1	2.46E-2	4.32E-2	6.40E-1	7.61E-3	2.15E-1	2.38E-3	-3.20E-1	5.45E-1
GWP-b	kg CO2 eq	4.73E-3	-5.20E-6	1.42E-3	6.15E-3	4.62E-6	-2.08E-4	2.99E-6	-2.23E-3	3.72E-3
GWP-luluc	kg CO2 eq	4.73E-4	1.62E-5	3.18E-5	5.21E-4	2.69E-6	9.37E-5	6.35E-8	-2.06E-4	4.11E-4
ODP	kg CFC11 eq	3.18E-7	5.01E-9	4.38E-9	3.27E-7	1.75E-9	2.56E-8	8.95E-11	-1.61E-7	1.94E-7
AP	mol H+ eq	2.65E-3	7.34E-4	2.22E-4	3.61E-3	4.33E-5	4.32E-4	2.18E-6	-1.21E-3	2.88E-3
EP-fw	kg P eq	2.59E-5	1.11E-7	5.84E-7	2.66E-5	6.26E-8	3.13E-6	2.86E-9	-1.18E-5	1.80E-5
EP-m	kg N eq	4.47E-4	1.82E-4	4.77E-5	6.77E-4	1.55E-5	1.04E-4	1.33E-6	-2.09E-4	5.89E-4
EP-T	mol N eq	4.86E-3	2.02E-3	5.10E-4	7.39E-3	1.71E-4	1.15E-3	8.67E-6	-2.22E-3	6.50E-3
POCP	kg NMVOC eq	1.66E-3	5.25E-4	2.41E-4	2.43E-3	4.88E-5	3.44E-4	2.98E-6	-7.72E-4	2.05E-3
ADP-mm	kg Sb eq	3.27E-4	2.28E-7	9.13E-7	3.28E-4	1.97E-7	1.70E-6	2.19E-9	-6.52E-6	3.24E-4
ADP-f	MJ	1.48E+1	3.21E-1	4.77E-1	1.56E+1	1.17E-1	1.18E+0	6.53E-3	-7.77E+0	9.11E+0
WDP	m3 depriv.	9.53E-1	5.29E-4	1.54E-2	9.69E-1	3.58E-4	4.71E-2	4.51E-5	-4.60E-1	5.57E-1
PM	disease inc.	1.78E-8	9.02E-10	1.48E-9	2.02E-8	6.87E-10	5.33E-9	4.50E-11	-7.64E-9	1.86E-8
IR	kBq U-235 eq	3.23E-2	1.38E-3	1.30E-3	3.49E-2	5.10E-4	4.15E-3	3.00E-5	-1.48E-2	2.48E-2
ETP-fw	CTUe	1.23E+1	2.13E-1	1.13E+0	1.36E+1	9.48E-2	9.19E+0	1.02E-1	-4.43E+0	1.86E+1
HTP-c	CTUh	4.37E-10	1.36E-11	4.45E-11	4.95E-10	3.37E-12	1.33E-10	1.81E-13	-1.69E-10	4.63E-10
HTP-nc	CTUh	1.41E-8	1.82E-10	2.98E-9	1.72E-8	1.13E-10	3.19E-9	1.96E-11	-5.84E-9	1.47E-8
SQP	Pt	1.89E+0	7.06E-2	1.51E-1	2.11E+0	9.99E-2	7.26E-1	1.67E-2	-8.20E-1	2.13E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.15E-1	2.45E-3	2.21E+0	2.92E+0	1.68E-3	8.59E-2	2.40E-4	-3.34E-1	2.68E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.15E-1	2.45E-3	2.21E+0	2.92E+0	1.68E-3	8.59E-2	2.40E-4	-3.34E-1	2.68E+0
PENRE	MJ	1.59E+1	3.40E-1	5.06E-1	1.67E+1	1.24E-1	1.26E+0	6.93E-3	-8.37E+0	9.72E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.59E+1	3.40E-1	5.06E-1	1.67E+1	1.24E-1	1.26E+0	6.93E-3	-8.37E+0	9.72E+0
PET	MJ	1.66E+1	3.43E-1	2.71E+0	1.96E+1	1.26E-1	1.34E+0	7.17E-3	-8.70E+0	1.24E+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	1.04E-2	1.90E-5	4.33E-4	1.09E-2	1.32E-5	1.29E-3	7.99E-6	-4.80E-3	7.36E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.09E-5	3.55E-7	5.47E-6	5.68E-5	2.99E-7	1.90E-6	7.97E-9	-6.46E-6	5.25E-5
NHWD	kg	5.53E-2	3.00E-3	1.10E-3	5.94E-2	7.24E-3	4.30E-2	2.89E-2	-2.45E-2	1.14E-1
RWD	kg	2.88E-5	2.22E-6	1.45E-6	3.24E-5	7.94E-7	4.41E-6	4.25E-8	-1.31E-5	2.46E-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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