

Environmental Profile

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

Ecochain v3.5.71



Product: 3037195 - OsmaS PVCU Manifold LH 38° WT 110 S/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	☑	☑	☑	☑									

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	2.20E+0	2.85E-2	1.97E-1	2.43E+0	2.45E-2	9.33E-1	1.16E-2	-1.04E+0	2.36E+0
GWP-f	kg CO2 eq	2.14E+0	2.85E-2	1.92E-1	2.36E+0	2.45E-2	9.33E-1	1.16E-2	-1.03E+0	2.30E+0
GWP-b	kg CO2 eq	5.78E-2	1.71E-5	4.30E-3	6.21E-2	1.49E-5	-9.21E-4	8.87E-6	-6.62E-3	5.46E-2
GWP-luluc	kg CO2 eq	5.95E-3	1.02E-5	1.73E-4	6.13E-3	8.66E-6	1.33E-4	4.29E-7	-6.24E-4	5.65E-3
ODP	kg CFC11 eq	2.09E-7	6.56E-9	1.64E-8	2.32E-7	5.64E-9	1.77E-8	3.16E-10	-4.77E-7	-2.21E-7
AP	mol H+ eq	2.02E-2	1.69E-4	1.06E-3	2.15E-2	1.39E-4	7.39E-4	8.58E-6	-3.78E-3	1.86E-2
EP-fw	kg P eq	2.04E-4	2.33E-7	2.70E-6	2.07E-4	2.01E-7	3.85E-6	1.65E-8	-3.55E-5	1.76E-4
EP-m	kg N eq	3.93E-3	5.96E-5	2.02E-4	4.19E-3	4.98E-5	2.15E-4	4.28E-6	-6.55E-4	3.81E-3
EP-T	mol N eq	4.87E-2	6.56E-4	2.21E-3	5.15E-2	5.49E-4	2.36E-3	3.23E-5	-6.99E-3	4.75E-2
POCP	kg NMVOC eq	1.20E-2	1.87E-4	9.42E-4	1.31E-2	1.57E-4	7.36E-4	1.18E-5	-2.48E-3	1.15E-2
ADP-mm	kg Sb eq	3.92E-2	7.33E-7	4.98E-6	3.92E-2	6.33E-7	2.90E-6	1.04E-8	-2.28E-5	3.92E-2
ADP-f	MJ	3.78E+1	4.37E-1	2.13E+0	4.03E+1	3.75E-1	2.33E+0	2.39E-2	-2.54E+1	1.77E+1
WDP	m3 depriv.	2.20E+0	1.34E-3	6.28E-2	2.26E+0	1.15E-3	4.54E-2	8.92E-4	-1.39E+0	9.20E-1
PM	disease inc.	1.04E-7	2.56E-9	7.31E-9	1.14E-7	2.21E-9	1.19E-8	1.65E-10	-2.44E-8	1.04E-7
IR	kBq U-235 eq	2.01E-1	1.91E-3	5.04E-3	2.08E-1	1.64E-3	6.99E-3	9.73E-5	-4.53E-2	1.72E-1
ETP-fw	CTUe	3.81E+2	3.54E-1	5.78E+0	3.87E+2	3.05E-1	3.00E+0	2.29E-2	-1.34E+1	3.77E+2
HTP-c	CTUh	9.09E-9	1.27E-11	2.27E-10	9.33E-9	1.08E-11	7.54E-10	1.16E-12	-5.10E-10	9.59E-9
HTP-nc	CTUh	2.67E-7	4.21E-10	1.13E-8	2.79E-7	3.63E-10	5.14E-9	1.71E-11	-1.75E-8	2.67E-7
SQP	Pt	1.64E+1	3.72E-1	7.49E-1	1.75E+1	3.21E-1	1.84E+0	5.76E-2	-2.51E+0	1.72E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.04E+0	6.24E-3	1.23E+1	1.63E+1	5.39E-3	1.14E-1	5.11E-4	-1.01E+0	1.54E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.04E+0	6.24E-3	1.23E+1	1.63E+1	5.39E-3	1.14E-1	5.11E-4	-1.01E+0	1.54E+1
PENRE	MJ	4.02E+1	4.64E-1	2.26E+0	4.29E+1	3.99E-1	2.49E+0	2.54E-2	-2.74E+1	1.85E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.02E+1	4.64E-1	2.26E+0	4.29E+1	3.99E-1	2.49E+0	2.54E-2	-2.74E+1	1.85E+1
PET	MJ	4.42E+1	4.70E-1	1.46E+1	5.93E+1	4.04E-1	2.60E+0	2.59E-2	-2.84E+1	3.39E+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	6.28E-2	4.92E-5	1.86E-3	6.47E-2	4.25E-5	1.59E-3	2.58E-5	-1.47E-2	5.17E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.98E-3	1.11E-6	1.71E-5	5.00E-3	9.60E-7	4.35E-6	3.55E-8	-2.00E-5	4.98E-3
NHWD	kg	3.66E-1	2.69E-2	3.56E-3	3.96E-1	2.33E-2	1.24E-1	9.76E-2	-7.40E-2	5.67E-1
RWD	kg	1.63E-4	2.97E-6	4.54E-6	1.71E-4	2.55E-6	8.87E-6	1.46E-7	-4.04E-5	1.42E-4
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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