

Environmental Profile

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

Ecochain v3.5.71



Product: 3040892 - OsmaS PVCU Bend 67.5° GY 110 D/SW
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	1.01E+0	4.29E-2	4.75E-2	1.10E+0	1.34E-2	3.71E-1	4.20E-3	-5.63E-1	9.25E-1
GWP-f	kg CO2 eq	9.99E-1	4.29E-2	4.60E-2	1.09E+0	1.34E-2	3.72E-1	4.20E-3	-5.58E-1	9.19E-1
GWP-b	kg CO2 eq	8.49E-3	-9.07E-6	1.51E-3	9.99E-3	8.12E-6	-3.67E-4	5.26E-6	-3.92E-3	5.72E-3
GWP-luluc	kg CO2 eq	8.34E-4	2.82E-5	3.39E-5	8.96E-4	4.73E-6	1.64E-4	1.13E-7	-3.63E-4	7.02E-4
ODP	kg CFC11 eq	5.50E-7	8.74E-9	4.66E-9	5.63E-7	3.08E-9	4.48E-8	1.57E-10	-2.82E-7	3.29E-7
AP	mol H+ eq	4.66E-3	1.28E-3	2.36E-4	6.18E-3	7.62E-5	7.56E-4	3.83E-6	-2.12E-3	4.89E-3
EP-fw	kg P eq	4.55E-5	1.94E-7	6.21E-7	4.63E-5	1.10E-7	5.48E-6	5.06E-9	-2.07E-5	3.12E-5
EP-m	kg N eq	7.83E-4	3.17E-4	5.08E-5	1.15E-3	2.73E-5	1.82E-4	2.34E-6	-3.67E-4	9.96E-4
EP-T	mol N eq	8.54E-3	3.53E-3	5.43E-4	1.26E-2	3.00E-4	2.01E-3	1.53E-5	-3.90E-3	1.10E-2
POCP	kg NMVOC eq	2.89E-3	9.16E-4	2.56E-4	4.07E-3	8.59E-5	6.02E-4	5.25E-6	-1.35E-3	3.40E-3
ADP-mm	kg Sb eq	5.80E-4	3.99E-7	9.71E-7	5.81E-4	3.46E-7	2.98E-6	3.86E-9	-1.15E-5	5.73E-4
ADP-f	MJ	2.54E+1	5.60E-1	5.07E-1	2.64E+1	2.05E-1	2.07E+0	1.15E-2	-1.36E+1	1.51E+1
WDP	m3 depriv.	1.67E+0	9.24E-4	1.64E-2	1.69E+0	6.30E-4	8.24E-2	8.30E-5	-8.09E-1	9.64E-1
PM	disease inc.	3.03E-8	1.58E-9	1.57E-9	3.34E-8	1.21E-9	9.35E-9	7.91E-11	-1.34E-8	3.06E-8
IR	kBq U-235 eq	5.50E-2	2.41E-3	1.38E-3	5.87E-2	8.97E-4	7.26E-3	5.27E-5	-2.61E-2	4.09E-2
ETP-fw	CTUe	2.17E+1	3.72E-1	1.20E+0	2.32E+1	1.67E-1	1.60E+1	1.78E-1	-7.78E+0	3.18E+1
HTP-c	CTUh	7.72E-10	2.38E-11	4.73E-11	8.43E-10	5.93E-12	2.35E-10	3.22E-13	-2.96E-10	7.87E-10
HTP-nc	CTUh	2.48E-8	3.18E-10	3.17E-9	2.83E-8	1.99E-10	5.58E-9	3.42E-11	-1.03E-8	2.39E-8
SQP	Pt	3.24E+0	1.23E-1	1.61E-1	3.53E+0	1.76E-1	1.27E+0	2.94E-2	-1.44E+0	3.57E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.25E+0	4.28E-3	2.35E+0	3.60E+0	2.94E-3	1.50E-1	4.21E-4	-5.87E-1	3.17E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.25E+0	4.28E-3	2.35E+0	3.60E+0	2.94E-3	1.50E-1	4.21E-4	-5.87E-1	3.17E+0
PENRE	MJ	2.72E+1	5.94E-1	5.38E-1	2.84E+1	2.18E-1	2.20E+0	1.22E-2	-1.46E+1	1.62E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.72E+1	5.94E-1	5.38E-1	2.84E+1	2.18E-1	2.20E+0	1.22E-2	-1.46E+1	1.62E+1
PET	MJ	2.85E+1	5.99E-1	2.88E+0	3.20E+1	2.21E-1	2.35E+0	1.26E-2	-1.52E+1	1.93E+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	1.84E-2	3.32E-5	4.61E-4	1.89E-2	2.32E-5	2.25E-3	1.40E-5	-8.44E-3	1.27E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.99E-5	6.20E-7	5.82E-6	9.64E-5	5.25E-7	3.34E-6	1.41E-8	-1.13E-5	8.89E-5
NHWD	kg	9.72E-2	5.25E-3	1.17E-3	1.04E-1	1.27E-2	7.52E-2	5.09E-2	-4.30E-2	1.99E-1
RWD	kg	4.77E-5	3.88E-6	1.54E-6	5.32E-5	1.40E-6	7.73E-6	7.47E-8	-2.30E-5	3.94E-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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