

Environmental Profile

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

Ecochain v3.5.71



Product: 3036331 - OsmaS PVCU Top Offset Bend WT 110 SW/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	8.53E-1	1.18E-2	1.00E-1	9.65E-1	1.02E-2	2.96E-1	4.63E-3	-4.07E-1	8.69E-1
GWP-f	kg CO2 eq	8.23E-1	1.18E-2	9.82E-2	9.33E-1	1.02E-2	2.97E-1	4.64E-3	-4.04E-1	8.40E-1
GWP-b	kg CO2 eq	2.75E-2	7.09E-6	2.08E-3	2.96E-2	6.20E-6	-4.11E-4	3.43E-6	-2.99E-3	2.62E-2
GWP-luluc	kg CO2 eq	2.55E-3	4.18E-6	8.97E-5	2.65E-3	3.61E-6	5.74E-5	1.81E-7	-2.75E-4	2.43E-3
ODP	kg CFC11 eq	6.98E-8	2.71E-9	8.18E-9	8.07E-8	2.35E-9	7.50E-9	1.27E-10	-2.10E-7	-1.19E-7
AP	mol H+ eq	8.30E-3	6.86E-5	5.45E-4	8.91E-3	5.82E-5	3.06E-4	3.47E-6	-1.62E-3	7.66E-3
EP-fw	kg P eq	8.70E-5	9.65E-8	1.39E-6	8.84E-5	8.40E-8	1.66E-6	6.87E-9	-1.57E-5	7.45E-5
EP-m	kg N eq	1.64E-3	2.43E-5	1.02E-4	1.77E-3	2.08E-5	8.76E-5	1.36E-6	-2.76E-4	1.60E-3
EP-T	mol N eq	2.04E-2	2.68E-4	1.13E-3	2.18E-2	2.29E-4	9.61E-4	1.30E-5	-2.94E-3	2.01E-2
POCP	kg NMVOC eq	4.78E-3	7.65E-5	4.74E-4	5.33E-3	6.56E-5	3.04E-4	4.73E-6	-1.03E-3	4.67E-3
ADP-mm	kg Sb eq	1.74E-2	3.03E-7	2.59E-6	1.74E-2	2.64E-7	1.25E-6	4.29E-9	-8.73E-6	1.74E-2
ADP-f	MJ	1.32E+1	1.80E-1	1.09E+0	1.44E+1	1.57E-1	1.00E+0	9.61E-3	-1.02E+1	5.39E+0
WDP	m3 depriv.	8.94E-1	5.52E-4	3.17E-2	9.27E-1	4.81E-4	1.86E-2	3.91E-4	-6.17E-1	3.30E-1
PM	disease inc.	3.85E-8	1.06E-9	3.77E-9	4.34E-8	9.22E-10	5.11E-9	6.64E-11	-1.04E-8	3.90E-8
IR	kBq U-235 eq	8.08E-2	7.88E-4	2.53E-3	8.42E-2	6.85E-4	3.01E-3	3.83E-5	-1.97E-2	6.82E-2
ETP-fw	CTUe	1.67E+2	1.46E-1	2.99E+0	1.70E+2	1.27E-1	1.14E+0	8.34E-3	-5.87E+0	1.65E+2
HTP-c	CTUh	3.98E-9	5.22E-12	1.17E-10	4.10E-9	4.53E-12	3.30E-10	4.90E-13	-2.24E-10	4.21E-9
HTP-nc	CTUh	1.17E-7	1.74E-10	5.68E-9	1.23E-7	1.52E-10	2.18E-9	6.80E-12	-7.77E-9	1.18E-7
SQP	Pt	6.67E+0	1.54E-1	3.86E-1	7.21E+0	1.34E-1	7.99E-1	2.30E-2	-1.08E+0	7.08E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.67E+0	2.58E-3	6.41E+0	8.08E+0	2.25E-3	4.91E-2	1.82E-4	-4.47E-1	7.68E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.67E+0	2.58E-3	6.41E+0	8.08E+0	2.25E-3	4.91E-2	1.82E-4	-4.47E-1	7.68E+0
PENRE	MJ	1.40E+1	1.91E-1	1.15E+0	1.53E+1	1.66E-1	1.07E+0	1.02E-2	-1.10E+1	5.62E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.40E+1	1.91E-1	1.15E+0	1.53E+1	1.66E-1	1.07E+0	1.02E-2	-1.10E+1	5.62E+0
PET	MJ	1.57E+1	1.94E-1	7.56E+0	2.34E+1	1.69E-1	1.12E+0	1.04E-2	-1.14E+1	1.33E+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	2.60E-2	2.04E-5	9.44E-4	2.70E-2	1.77E-5	5.60E-4	1.02E-5	-6.45E-3	2.11E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.21E-3	4.60E-7	8.36E-6	2.22E-3	4.01E-7	1.81E-6	1.45E-8	-7.96E-6	2.21E-3
NHWD	kg	1.51E-1	1.11E-2	1.74E-3	1.64E-1	9.72E-3	5.13E-2	3.89E-2	-3.26E-2	2.31E-1
RWD	kg	6.11E-5	1.23E-6	2.21E-6	6.45E-5	1.07E-6	3.82E-6	5.79E-8	-1.73E-5	5.21E-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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