

Environmental Profile

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

Ecochain v3.5.71



Product: 3036429 - OsmaS PVCU WC Connector 90° WT 110 P/E
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	1.45E+0	1.80E-2	1.34E-1	1.60E+0	1.57E-2	6.59E-1	7.63E-3	-6.75E-1	1.61E+0
GWP-f	kg CO2 eq	1.41E+0	1.80E-2	1.31E-1	1.56E+0	1.57E-2	6.60E-1	7.63E-3	-6.71E-1	1.57E+0
GWP-b	kg CO2 eq	3.52E-2	1.08E-5	2.69E-3	3.79E-2	9.53E-6	-5.69E-4	5.91E-6	-4.05E-3	3.33E-2
GWP-luluc	kg CO2 eq	3.76E-3	6.41E-6	1.21E-4	3.89E-3	5.55E-6	8.32E-5	2.75E-7	-3.88E-4	3.59E-3
ODP	kg CFC11 eq	1.48E-7	4.14E-9	1.08E-8	1.63E-7	3.62E-9	1.12E-8	2.08E-10	-2.97E-7	-1.19E-7
AP	mol H+ eq	1.30E-2	1.07E-4	7.31E-4	1.39E-2	8.94E-5	4.73E-4	5.61E-6	-2.38E-3	1.21E-2
EP-fw	kg P eq	1.30E-4	1.47E-7	1.85E-6	1.32E-4	1.29E-7	2.42E-6	1.06E-8	-2.20E-5	1.12E-4
EP-m	kg N eq	2.52E-3	3.78E-5	1.36E-4	2.69E-3	3.20E-5	1.39E-4	3.09E-6	-4.15E-4	2.45E-3
EP-T	mol N eq	3.11E-2	4.16E-4	1.50E-3	3.30E-2	3.52E-4	1.52E-3	2.12E-5	-4.43E-3	3.05E-2
POCP	kg NMVOC eq	7.80E-3	1.19E-4	6.26E-4	8.55E-3	1.01E-4	4.71E-4	7.72E-6	-1.58E-3	7.55E-3
ADP-mm	kg Sb eq	2.45E-2	4.62E-7	3.50E-6	2.45E-2	4.06E-7	1.83E-6	6.75E-9	-1.53E-5	2.45E-2
ADP-f	MJ	2.57E+1	2.76E-1	1.45E+0	2.74E+1	2.41E-1	1.47E+0	1.57E-2	-1.64E+1	1.28E+1
WDP	m3 depriv.	1.41E+0	8.42E-4	4.20E-2	1.46E+0	7.39E-4	2.94E-2	5.60E-4	-8.60E-1	6.28E-1
PM	disease inc.	7.02E-8	1.61E-9	5.07E-9	7.69E-8	1.42E-9	7.48E-9	1.08E-10	-1.55E-8	7.04E-8
IR	kBq U-235 eq	1.32E-1	1.20E-3	3.34E-3	1.36E-1	1.05E-3	4.40E-3	6.44E-5	-2.84E-2	1.13E-1
ETP-fw	CTUe	2.39E+2	2.23E-1	4.02E+0	2.43E+2	1.96E-1	2.01E+0	1.57E-2	-8.34E+0	2.37E+2
HTP-c	CTUh	5.71E-9	7.99E-12	1.58E-10	5.88E-9	6.96E-12	4.70E-10	7.46E-13	-3.18E-10	6.04E-9
HTP-nc	CTUh	1.68E-7	2.66E-10	7.49E-9	1.75E-7	2.33E-10	3.26E-9	1.13E-11	-1.09E-8	1.68E-7
SQP	Pt	1.06E+1	2.34E-1	5.19E-1	1.14E+1	2.06E-1	1.16E+0	3.79E-2	-1.58E+0	1.12E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.59E+0	3.94E-3	8.67E+0	1.13E+1	3.46E-3	7.19E-2	3.53E-4	-6.31E-1	1.07E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.59E+0	3.94E-3	8.67E+0	1.13E+1	3.46E-3	7.19E-2	3.53E-4	-6.31E-1	1.07E+1
PENRE	MJ	2.74E+1	2.93E-1	1.54E+0	2.92E+1	2.56E-1	1.56E+0	1.67E-2	-1.77E+1	1.34E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.74E+1	2.93E-1	1.54E+0	2.92E+1	2.56E-1	1.56E+0	1.67E-2	-1.77E+1	1.34E+1
PET	MJ	3.00E+1	2.97E-1	1.02E+1	4.05E+1	2.59E-1	1.64E+0	1.70E-2	-1.83E+1	2.41E+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	4.03E-2	3.10E-5	1.26E-3	4.15E-2	2.73E-5	1.11E-3	1.71E-5	-9.20E-3	3.35E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.11E-3	7.01E-7	1.08E-5	3.12E-3	6.16E-7	2.78E-6	2.31E-8	-1.29E-5	3.11E-3
NHWD	kg	2.36E-1	1.69E-2	2.26E-3	2.55E-1	1.49E-2	7.86E-2	6.42E-2	-4.60E-2	3.67E-1
RWD	kg	1.10E-4	1.87E-6	2.87E-6	1.15E-4	1.64E-6	5.57E-6	9.58E-8	-2.55E-5	9.65E-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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