

Environmental Profile

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

Ecochain v3.5.71



Product: 3036569 - OsmaS PP WC Connector 90° WT 4"
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	8.20E-1	2.05E-2	9.03E-2	9.31E-1	7.28E-3	5.12E-1	4.03E-3	-4.11E-1	1.04E+0
GWP-f	kg CO2 eq	8.24E-1	2.05E-2	8.87E-2	9.34E-1	7.28E-3	5.12E-1	4.03E-3	-4.10E-1	1.05E+0
GWP-b	kg CO2 eq	-4.50E-3	1.17E-5	1.55E-3	-2.94E-3	4.42E-6	-2.11E-4	3.68E-6	-8.25E-4	-3.96E-3
GWP-luluc	kg CO2 eq	4.18E-4	7.50E-6	8.60E-5	5.12E-4	2.58E-6	3.48E-5	7.31E-8	-6.67E-5	4.83E-4
ODP	kg CFC11 eq	9.04E-8	4.69E-9	6.88E-9	1.02E-7	1.68E-9	5.06E-9	1.04E-10	-3.03E-8	7.86E-8
AP	mol H+ eq	4.28E-3	1.42E-4	5.05E-4	4.93E-3	4.15E-5	2.32E-4	2.52E-6	-9.03E-4	4.30E-3
EP-fw	kg P eq	2.02E-5	1.64E-7	1.27E-6	2.16E-5	5.99E-8	1.03E-6	3.34E-9	-3.67E-6	1.90E-5
EP-m	kg N eq	6.13E-4	4.75E-5	9.08E-5	7.52E-4	1.48E-5	7.18E-5	2.76E-6	-1.72E-4	6.69E-4
EP-T	mol N eq	6.89E-3	5.25E-4	1.01E-3	8.42E-3	1.63E-4	7.91E-4	1.02E-5	-1.91E-3	7.48E-3
POCP	kg NMVOC eq	3.11E-3	1.48E-4	4.07E-4	3.67E-3	4.67E-5	2.36E-4	3.77E-6	-8.30E-4	3.12E-3
ADP-mm	kg Sb eq	1.32E-4	5.12E-7	2.49E-6	1.35E-4	1.88E-7	7.73E-7	2.53E-9	-6.03E-6	1.29E-4
ADP-f	MJ	2.58E+1	3.12E-1	9.83E-1	2.70E+1	1.12E-1	6.25E-1	7.63E-3	-1.09E+1	1.69E+1
WDP	m3 depriv.	5.73E-1	9.37E-4	2.77E-2	6.02E-1	3.43E-4	1.51E-2	4.17E-5	-1.63E-1	4.54E-1
PM	disease inc.	3.99E-8	1.79E-9	3.52E-9	4.53E-8	6.57E-10	3.26E-9	5.23E-11	-7.17E-9	4.21E-8
IR	kBq U-235 eq	3.89E-2	1.36E-3	2.17E-3	4.24E-2	4.88E-4	1.87E-3	3.58E-5	-5.81E-3	3.90E-2
ETP-fw	CTUe	1.08E+1	2.51E-1	2.82E+0	1.38E+1	9.07E-2	1.18E+0	9.84E-3	-1.48E+0	1.36E+1
HTP-c	CTUh	3.93E-10	9.17E-12	1.11E-10	5.13E-10	3.23E-12	8.72E-11	1.95E-13	-6.14E-11	5.42E-10
HTP-nc	CTUh	8.26E-9	2.96E-10	4.81E-9	1.34E-8	1.08E-10	1.22E-9	4.97E-12	-1.60E-9	1.31E-8
SQP	Pt	2.86E+0	2.58E-1	3.61E-1	3.48E+0	9.56E-2	4.82E-1	1.95E-2	-3.60E-1	3.72E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.75E-1	4.38E-3	6.19E+0	6.87E+0	1.60E-3	3.08E-2	3.13E-4	-1.28E-1	6.78E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.75E-1	4.38E-3	6.19E+0	6.87E+0	1.60E-3	3.08E-2	3.13E-4	-1.28E-1	6.78E+0
PENRE	MJ	2.76E+1	3.31E-1	1.04E+0	2.89E+1	1.19E-1	6.67E-1	8.09E-3	-1.18E+1	1.80E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.76E+1	3.31E-1	1.04E+0	2.89E+1	1.19E-1	6.67E-1	8.09E-3	-1.18E+1	1.80E+1
PET	MJ	2.82E+1	3.36E-1	7.24E+0	3.58E+1	1.20E-1	6.98E-1	8.41E-3	-1.19E+1	2.47E+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	1.15E-2	3.45E-5	8.41E-4	1.24E-2	1.26E-5	7.45E-4	9.42E-6	-2.53E-3	1.06E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.86E-6	7.78E-7	6.38E-6	1.50E-5	2.86E-7	1.21E-6	9.20E-9	-4.95E-6	1.16E-5
NHWD	kg	7.94E-2	1.86E-2	1.36E-3	9.94E-2	6.92E-3	3.71E-2	3.34E-2	-8.44E-3	1.68E-1
RWD	kg	4.75E-5	2.12E-6	1.69E-6	5.13E-5	7.60E-7	2.37E-6	4.99E-8	-5.95E-6	4.85E-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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