

Environmental Profile

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

Ecochain v3.5.71



Product: 3035884 - OsmaS PVCU Socket Plug E 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	4.05E-1	3.68E-3	2.82E-2	4.37E-1	4.82E-3	1.43E-1	2.19E-3	-1.93E-1	3.94E-1
GWP-f	kg CO2 eq	3.90E-1	3.68E-3	2.73E-2	4.21E-1	4.82E-3	1.43E-1	2.19E-3	-1.91E-1	3.80E-1
GWP-b	kg CO2 eq	1.40E-2	2.23E-6	8.95E-4	1.49E-2	2.93E-6	-1.94E-4	1.59E-6	-1.44E-3	1.33E-2
GWP-luluc	kg CO2 eq	1.28E-3	1.30E-6	2.01E-5	1.30E-3	1.70E-6	2.71E-5	8.84E-8	-1.33E-4	1.20E-3
ODP	kg CFC11 eq	3.07E-8	8.47E-10	2.77E-9	3.43E-8	1.11E-9	3.54E-9	5.99E-11	-1.02E-7	-6.32E-8
AP	mol H+ eq	4.03E-3	2.09E-5	1.40E-4	4.19E-3	2.74E-5	1.45E-4	1.65E-6	-7.70E-4	3.60E-3
EP-fw	kg P eq	4.33E-5	3.02E-8	3.69E-7	4.37E-5	3.96E-8	7.82E-7	3.34E-9	-7.59E-6	3.69E-5
EP-m	kg N eq	8.10E-4	7.49E-6	3.01E-5	8.48E-4	9.82E-6	4.15E-5	5.58E-7	-1.31E-4	7.68E-4
EP-T	mol N eq	1.01E-2	8.26E-5	3.22E-4	1.05E-2	1.08E-4	4.54E-4	6.15E-6	-1.40E-3	9.68E-3
POCP	kg NMVOC eq	2.31E-3	2.36E-5	1.52E-4	2.49E-3	3.09E-5	1.44E-4	2.24E-6	-4.86E-4	2.18E-3
ADP-mm	kg Sb eq	8.80E-3	9.51E-8	5.76E-7	8.80E-3	1.25E-7	5.91E-7	2.07E-9	-4.21E-6	8.79E-3
ADP-f	MJ	5.78E+0	5.64E-2	3.01E-1	6.14E+0	7.39E-2	4.74E-1	4.56E-3	-4.76E+0	1.92E+0
WDP	m3 depriv.	4.33E-1	1.73E-4	9.74E-3	4.43E-1	2.27E-4	8.70E-3	1.96E-4	-2.97E-1	1.55E-1
PM	disease inc.	1.80E-8	3.32E-10	9.34E-10	1.92E-8	4.35E-10	2.41E-9	3.15E-11	-4.90E-9	1.72E-8
IR	kBq U-235 eq	3.90E-2	2.47E-4	8.20E-4	4.00E-2	3.23E-4	1.42E-3	1.80E-5	-9.52E-3	3.23E-2
ETP-fw	CTUe	8.41E+1	4.58E-2	7.14E-1	8.48E+1	6.00E-2	5.33E-1	3.77E-3	-2.84E+0	8.26E+1
HTP-c	CTUh	2.00E-9	1.63E-12	2.81E-11	2.03E-9	2.14E-12	1.63E-10	2.40E-13	-1.08E-10	2.08E-9
HTP-nc	CTUh	5.90E-8	5.46E-11	1.88E-9	6.10E-8	7.16E-11	1.05E-9	3.23E-12	-3.76E-9	5.83E-8
SQP	Pt	3.25E+0	4.83E-2	9.55E-2	3.39E+0	6.33E-2	3.78E-1	1.09E-2	-5.23E-1	3.32E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.17E-1	8.10E-4	1.39E+0	2.21E+0	1.06E-3	2.32E-2	7.91E-5	-2.15E-1	2.02E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.17E-1	8.10E-4	1.39E+0	2.21E+0	1.06E-3	2.32E-2	7.91E-5	-2.15E-1	2.02E+0
PENRE	MJ	6.15E+0	5.99E-2	3.19E-1	6.52E+0	7.85E-2	5.05E-1	4.84E-3	-5.12E+0	1.99E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.15E+0	5.99E-2	3.19E-1	6.52E+0	7.85E-2	5.05E-1	4.84E-3	-5.12E+0	1.99E+0
PET	MJ	6.96E+0	6.07E-2	1.71E+0	8.73E+0	7.96E-2	5.28E-1	4.92E-3	-5.34E+0	4.01E+0
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	1.27E-2	6.39E-6	2.73E-4	1.30E-2	8.37E-6	2.60E-4	4.78E-6	-3.09E-3	1.02E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.12E-3	1.44E-7	3.45E-6	1.12E-3	1.89E-7	8.61E-7	6.99E-9	-3.86E-6	1.12E-3
NHWD	kg	7.26E-2	3.50E-3	6.93E-4	7.68E-2	4.58E-3	2.44E-2	1.83E-2	-1.57E-2	1.08E-1
RWD	kg	2.84E-5	3.84E-7	9.15E-7	2.97E-5	5.03E-7	1.81E-6	2.73E-8	-8.36E-6	2.37E-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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