

Environmental Profile

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

Ecochain v3.5.71



Product: 3032472 - OsmaS PP Adj Bend 90° GY 110 S/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	1.03E+0	3.99E-2	1.21E-1	1.19E+0	1.29E-2	4.36E-1	6.17E-3	-6.05E-1	1.04E+0
GWP-f	kg CO2 eq	1.03E+0	3.98E-2	1.19E-1	1.19E+0	1.28E-2	4.37E-1	6.17E-3	-6.03E-1	1.04E+0
GWP-b	kg CO2 eq	2.25E-3	2.25E-5	2.43E-3	4.69E-3	7.80E-6	-4.96E-4	5.40E-6	-2.12E-3	2.09E-3
GWP-luluc	kg CO2 eq	3.45E-4	1.46E-5	1.10E-4	4.69E-4	4.54E-6	7.07E-5	1.11E-7	-1.32E-4	4.13E-4
ODP	kg CFC11 eq	4.63E-8	9.12E-9	9.74E-9	6.52E-8	2.96E-9	9.31E-9	1.56E-10	-4.35E-8	3.41E-8
AP	mol H+ eq	4.04E-3	2.80E-4	6.62E-4	4.98E-3	7.31E-5	3.94E-4	3.76E-6	-1.69E-3	3.77E-3
EP-fw	kg P eq	1.79E-5	3.19E-7	1.68E-6	1.99E-5	1.06E-7	2.04E-6	5.03E-9	-7.50E-6	1.45E-5
EP-m	kg N eq	6.48E-4	9.33E-5	1.23E-4	8.64E-4	2.62E-5	1.15E-4	2.78E-6	-3.00E-4	7.09E-4
EP-T	mol N eq	7.43E-3	1.03E-3	1.36E-3	9.81E-3	2.88E-4	1.27E-3	1.52E-5	-3.31E-3	8.08E-3
POCP	kg NMVOC eq	3.33E-3	2.89E-4	5.66E-4	4.18E-3	8.25E-5	3.99E-4	5.68E-6	-1.49E-3	3.18E-3
ADP-mm	kg Sb eq	5.87E-5	9.93E-7	3.17E-6	6.29E-5	3.32E-7	1.53E-6	3.82E-9	-5.33E-6	5.94E-5
ADP-f	MJ	3.51E+1	6.06E-1	1.31E+0	3.71E+1	1.97E-1	1.23E+0	1.14E-2	-1.84E+1	2.01E+1
WDP	m3 depriv.	7.24E-1	1.82E-3	3.80E-2	7.64E-1	6.05E-4	2.48E-2	7.44E-5	-3.53E-1	4.36E-1
PM	disease inc.	3.70E-8	3.48E-9	4.58E-9	4.50E-8	1.16E-9	6.38E-9	7.86E-11	-1.37E-8	3.89E-8
IR	kBq U-235 eq	2.72E-2	2.65E-3	3.02E-3	3.28E-2	8.62E-4	3.70E-3	5.29E-5	-1.01E-2	2.74E-2
ETP-fw	CTUe	7.93E+0	4.88E-1	3.64E+0	1.21E+1	1.60E-1	1.51E+0	1.07E-2	-2.72E+0	1.10E+1
HTP-c	CTUh	2.87E-10	1.78E-11	1.43E-10	4.48E-10	5.70E-12	1.76E-10	2.94E-13	-1.13E-10	5.16E-10
HTP-nc	CTUh	7.79E-9	5.75E-10	6.77E-9	1.51E-8	1.91E-10	2.12E-9	6.52E-12	-3.32E-9	1.41E-8
SQP	Pt	1.86E+0	5.01E-1	4.69E-1	2.83E+0	1.69E-1	9.79E-1	2.92E-2	-5.82E-1	3.43E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.08E-1	8.50E-3	7.85E+0	8.46E+0	2.83E-3	6.07E-2	4.40E-4	-2.56E-1	8.27E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.08E-1	8.50E-3	7.85E+0	8.46E+0	2.83E-3	6.07E-2	4.40E-4	-2.56E-1	8.27E+0
PENRE	MJ	3.77E+1	6.44E-1	1.39E+0	3.97E+1	2.09E-1	1.31E+0	1.21E-2	-1.98E+1	2.15E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.77E+1	6.44E-1	1.39E+0	3.97E+1	2.09E-1	1.31E+0	1.21E-2	-1.98E+1	2.15E+1
PET	MJ	3.83E+1	6.52E-1	9.24E+0	4.82E+1	2.12E-1	1.37E+0	1.26E-2	-2.01E+1	2.97E+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	1.19E-2	6.70E-5	1.14E-3	1.31E-2	2.23E-5	8.05E-4	1.40E-5	-5.05E-3	8.93E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.25E-6	1.51E-6	9.77E-6	1.75E-5	5.04E-7	2.06E-6	1.39E-8	-5.26E-6	1.48E-5
NHWD	kg	4.88E-2	3.61E-2	2.04E-3	8.69E-2	1.22E-2	6.18E-2	5.02E-2	-1.64E-2	1.95E-1
RWD	kg	2.82E-5	4.13E-6	2.59E-6	3.49E-5	1.34E-6	4.69E-6	7.45E-8	-9.18E-6	3.18E-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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