

Environmental Profile

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

Ecochain v3.5.71



Product: 3020505 - OsmaS PP All Fit Spig Bend 90° WT 50
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	3.09E+0	4.10E-2	8.04E-2	3.21E+0	1.65E-2	4.97E-1	7.22E-3	-1.55E+0	2.18E+0
GWP-f	kg CO2 eq	3.07E+0	4.10E-2	7.80E-2	3.19E+0	1.65E-2	4.97E-1	7.22E-3	-1.54E+0	2.17E+0
GWP-b	kg CO2 eq	2.25E-2	2.27E-5	2.35E-3	2.49E-2	1.00E-5	-6.50E-4	7.13E-6	-1.07E-2	1.36E-2
GWP-luluc	kg CO2 eq	2.45E-4	1.52E-5	6.07E-5	3.21E-4	5.85E-6	9.69E-5	1.50E-7	-6.74E-5	3.57E-4
ODP	kg CFC11 eq	5.40E-8	9.36E-9	7.58E-9	7.09E-8	3.81E-9	1.38E-8	1.97E-10	-5.25E-8	3.62E-8
AP	mol H+ eq	1.37E-2	3.05E-4	4.08E-4	1.44E-2	9.42E-5	5.44E-4	4.92E-6	-4.71E-3	1.03E-2
EP-fw	kg P eq	5.39E-5	3.25E-7	1.06E-6	5.53E-5	1.36E-7	2.83E-6	6.74E-9	-2.14E-5	3.68E-5
EP-m	kg N eq	1.84E-3	9.98E-5	8.50E-5	2.03E-3	3.37E-5	1.61E-4	8.77E-6	-8.01E-4	1.43E-3
EP-T	mol N eq	1.83E-2	1.10E-3	9.15E-4	2.03E-2	3.71E-4	1.76E-3	1.95E-5	-7.99E-3	1.45E-2
POCP	kg NMVOC eq	8.54E-3	3.08E-4	4.21E-4	9.26E-3	1.06E-4	5.46E-4	7.10E-6	-3.74E-3	6.19E-3
ADP-mm	kg Sb eq	1.18E-5	1.01E-6	1.74E-6	1.46E-5	4.28E-7	2.08E-6	4.90E-9	-1.98E-6	1.51E-5
ADP-f	MJ	5.75E+1	6.22E-1	8.61E-1	5.89E+1	2.54E-1	1.65E+0	1.45E-2	-2.91E+1	3.18E+1
WDP	m3 depriv.	1.74E+0	1.85E-3	2.72E-2	1.77E+0	7.79E-4	3.44E-2	1.02E-4	-7.51E-1	1.05E+0
PM	disease inc.	1.28E-7	3.54E-9	2.75E-9	1.34E-7	1.49E-9	8.55E-9	9.92E-11	-5.30E-8	9.11E-8
IR	kBq U-235 eq	1.55E-2	2.72E-3	2.27E-3	2.05E-2	1.11E-3	5.02E-3	6.94E-5	-4.68E-3	2.20E-2
ETP-fw	CTUe	3.13E+1	4.99E-1	2.12E+0	3.40E+1	2.06E-1	2.51E+0	2.94E-2	-1.24E+1	2.43E+1
HTP-c	CTUh	1.16E-9	1.84E-11	8.32E-11	1.26E-9	7.33E-12	2.52E-10	4.09E-13	-2.75E-10	1.24E-9
HTP-nc	CTUh	2.08E-8	5.86E-10	5.17E-9	2.66E-8	2.46E-10	3.01E-9	1.22E-11	-7.47E-9	2.24E-8
SQP	Pt	2.35E+0	5.08E-1	2.81E-1	3.14E+0	2.17E-1	1.30E+0	3.68E-2	-4.33E-1	4.26E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.49E-1	8.65E-3	4.24E+0	4.90E+0	3.64E-3	8.35E-2	6.45E-4	-1.90E-1	4.79E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.49E-1	8.65E-3	4.24E+0	4.90E+0	3.64E-3	8.35E-2	6.45E-4	-1.90E-1	4.79E+0
PENRE	MJ	6.19E+1	6.61E-1	9.14E-1	6.35E+1	2.69E-1	1.76E+0	1.54E-2	-3.15E+1	3.41E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.19E+1	6.61E-1	9.14E-1	6.35E+1	2.69E-1	1.76E+0	1.54E-2	-3.15E+1	3.41E+1
PET	MJ	6.26E+1	6.69E-1	5.15E+0	6.84E+1	2.73E-1	1.84E+0	1.61E-2	-3.17E+1	3.89E+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	4.11E-2	6.82E-5	7.74E-4	4.20E-2	2.87E-5	1.02E-3	1.79E-5	-1.68E-2	2.62E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.38E-6	1.53E-6	9.12E-6	1.80E-5	6.49E-7	2.77E-6	1.76E-8	-6.19E-6	1.53E-5
NHWD	kg	2.58E-1	3.65E-2	1.84E-3	2.96E-1	1.57E-2	8.15E-2	6.31E-2	-4.99E-2	4.07E-1
RWD	kg	1.63E-5	4.24E-6	2.42E-6	2.30E-5	1.73E-6	6.30E-6	9.54E-8	-4.95E-6	2.61E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777