

Environmental Profile

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

Ecochain v3.5.71



Product: 3036412 - OsmaS PVCU Hopper Head BK 110
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

This document and supporting material contain confidential and proprietary business information of Wavin - UK - Chippenham - Verified. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - UK - Chippenham - Verified.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.31E+0	5.62E-2	1.01E-1	1.47E+0	1.74E-2	4.80E-1	5.44E-3	-7.30E-1	1.24E+0
GWP-f	kg CO2 eq	1.30E+0	5.61E-2	9.81E-2	1.45E+0	1.74E-2	4.80E-1	5.44E-3	-7.24E-1	1.23E+0
GWP-b	kg CO2 eq	1.12E-2	-1.20E-5	3.22E-3	1.44E-2	1.05E-5	-4.75E-4	6.84E-6	-5.09E-3	8.83E-3
GWP-luluc	kg CO2 eq	1.07E-3	3.69E-5	7.23E-5	1.18E-3	6.15E-6	2.14E-4	1.45E-7	-4.72E-4	9.31E-4
ODP	kg CFC11 eq	7.25E-7	1.14E-8	9.94E-9	7.47E-7	4.00E-9	5.86E-8	2.04E-10	-3.66E-7	4.43E-7
AP	mol H+ eq	6.00E-3	1.68E-3	5.04E-4	8.18E-3	9.90E-5	9.86E-4	4.97E-6	-2.75E-3	6.52E-3
EP-fw	kg P eq	5.88E-5	2.53E-7	1.32E-6	6.04E-5	1.43E-7	7.15E-6	6.52E-9	-2.69E-5	4.08E-5
EP-m	kg N eq	1.01E-3	4.16E-4	1.08E-4	1.54E-3	3.54E-5	2.38E-4	3.05E-6	-4.76E-4	1.34E-3
EP-T	mol N eq	1.10E-2	4.62E-3	1.16E-3	1.68E-2	3.90E-4	2.62E-3	1.98E-5	-5.06E-3	1.47E-2
POCP	kg NMVOC eq	3.75E-3	1.20E-3	5.46E-4	5.50E-3	1.12E-4	7.84E-4	6.81E-6	-1.76E-3	4.64E-3
ADP-mm	kg Sb eq	7.55E-4	5.19E-7	2.07E-6	7.58E-4	4.49E-7	3.89E-6	4.99E-9	-1.49E-5	7.47E-4
ADP-f	MJ	3.34E+1	7.32E-1	1.08E+0	3.52E+1	2.67E-1	2.70E+0	1.49E-2	-1.76E+1	2.06E+1
WDP	m3 depriv.	2.17E+0	1.20E-3	3.50E-2	2.21E+0	8.18E-4	1.08E-1	1.02E-4	-1.05E+0	1.27E+0
PM	disease inc.	4.00E-8	2.05E-9	3.36E-9	4.54E-8	1.57E-9	1.22E-8	1.03E-10	-1.74E-8	4.18E-8
IR	kBq U-235 eq	7.32E-2	3.15E-3	2.95E-3	7.93E-2	1.17E-3	9.47E-3	6.84E-5	-3.39E-2	5.62E-2
ETP-fw	CTUe	2.79E+1	4.85E-1	2.57E+0	3.10E+1	2.17E-1	2.10E+1	2.33E-1	-1.01E+1	4.23E+1
HTP-c	CTUh	9.98E-10	3.11E-11	1.01E-10	1.13E-9	7.71E-12	3.02E-10	4.14E-13	-3.85E-10	1.05E-9
HTP-nc	CTUh	3.21E-8	4.15E-10	6.76E-9	3.93E-8	2.58E-10	7.28E-9	4.48E-11	-1.33E-8	3.36E-8
SQP	Pt	4.26E+0	1.60E-1	3.43E-1	4.76E+0	2.28E-1	1.66E+0	3.81E-2	-1.87E+0	4.81E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.62E+0	5.57E-3	5.01E+0	6.63E+0	3.83E-3	1.96E-1	5.50E-4	-7.62E-1	6.07E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.62E+0	5.57E-3	5.01E+0	6.63E+0	3.83E-3	1.96E-1	5.50E-4	-7.62E-1	6.07E+0
PENRE	MJ	3.58E+1	7.77E-1	1.15E+0	3.78E+1	2.83E-1	2.87E+0	1.58E-2	-1.90E+1	2.19E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.58E+1	7.77E-1	1.15E+0	3.78E+1	2.83E-1	2.87E+0	1.58E-2	-1.90E+1	2.19E+1
PET	MJ	3.75E+1	7.83E-1	6.15E+0	4.44E+1	2.87E-1	3.06E+0	1.64E-2	-1.98E+1	2.80E+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	2.36E-2	4.33E-5	9.83E-4	2.46E-2	3.02E-5	2.94E-3	1.83E-5	-1.10E-2	1.66E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.17E-4	8.08E-7	1.24E-5	1.30E-4	6.82E-7	4.35E-6	1.82E-8	-1.46E-5	1.21E-4
NHWD	kg	1.25E-1	6.75E-3	2.49E-3	1.35E-1	1.65E-2	9.77E-2	6.61E-2	-5.59E-2	2.59E-1
RWD	kg	6.51E-5	5.08E-6	3.29E-6	7.35E-5	1.81E-6	1.01E-5	9.71E-8	-2.99E-5	5.56E-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