

Environmental Profile

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

Ecochain v3.5.71



Product: 3036521 - OsmaS PVCU Bend 67.5° BK 110 D/SW
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	1.01E+0	4.32E-2	8.12E-2	1.13E+0	1.34E-2	3.71E-1	4.19E-3	-5.63E-1	9.59E-1
GWP-f	kg CO2 eq	1.00E+0	4.32E-2	7.86E-2	1.12E+0	1.34E-2	3.72E-1	4.19E-3	-5.59E-1	9.52E-1
GWP-b	kg CO2 eq	8.53E-3	-9.20E-6	2.58E-3	1.11E-2	8.12E-6	-3.66E-4	5.26E-6	-3.92E-3	6.83E-3
GWP-luluc	kg CO2 eq	8.27E-4	2.84E-5	5.79E-5	9.13E-4	4.73E-6	1.65E-4	1.12E-7	-3.63E-4	7.20E-4
ODP	kg CFC11 eq	5.58E-7	8.80E-9	7.97E-9	5.75E-7	3.08E-9	4.51E-8	1.57E-10	-2.82E-7	3.41E-7
AP	mol H+ eq	4.63E-3	1.29E-3	4.04E-4	6.33E-3	7.62E-5	7.59E-4	3.83E-6	-2.12E-3	5.04E-3
EP-fw	kg P eq	4.53E-5	1.95E-7	1.06E-6	4.66E-5	1.10E-7	5.50E-6	5.02E-9	-2.07E-5	3.15E-5
EP-m	kg N eq	7.81E-4	3.20E-4	8.68E-5	1.19E-3	2.73E-5	1.83E-4	2.35E-6	-3.67E-4	1.03E-3
EP-T	mol N eq	8.49E-3	3.56E-3	9.28E-4	1.30E-2	3.00E-4	2.02E-3	1.53E-5	-3.90E-3	1.14E-2
POCP	kg NMVOC eq	2.90E-3	9.24E-4	4.38E-4	4.26E-3	8.59E-5	6.04E-4	5.24E-6	-1.35E-3	3.60E-3
ADP-mm	kg Sb eq	5.79E-4	4.00E-7	1.66E-6	5.81E-4	3.46E-7	2.99E-6	3.85E-9	-1.15E-5	5.73E-4
ADP-f	MJ	2.58E+1	5.63E-1	8.67E-1	2.72E+1	2.05E-1	2.07E+0	1.15E-2	-1.36E+1	1.59E+1
WDP	m3 depriv.	1.67E+0	9.27E-4	2.81E-2	1.70E+0	6.30E-4	8.29E-2	7.92E-5	-8.09E-1	9.76E-1
PM	disease inc.	3.10E-8	1.58E-9	2.69E-9	3.53E-8	1.21E-9	9.37E-9	7.91E-11	-1.34E-8	3.25E-8
IR	kBq U-235 eq	5.65E-2	2.42E-3	2.36E-3	6.13E-2	8.97E-4	7.29E-3	5.27E-5	-2.61E-2	4.35E-2
ETP-fw	CTUe	2.15E+1	3.74E-1	2.06E+0	2.40E+1	1.67E-1	1.62E+1	1.79E-1	-7.78E+0	3.27E+1
HTP-c	CTUh	7.68E-10	2.40E-11	8.09E-11	8.73E-10	5.93E-12	2.33E-10	3.19E-13	-2.96E-10	8.16E-10
HTP-nc	CTUh	2.47E-8	3.19E-10	5.42E-9	3.05E-8	1.99E-10	5.60E-9	3.44E-11	-1.03E-8	2.61E-8
SQP	Pt	3.29E+0	1.23E-1	2.75E-1	3.69E+0	1.76E-1	1.28E+0	2.94E-2	-1.44E+0	3.73E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.25E+0	4.29E-3	4.01E+0	5.27E+0	2.94E-3	1.51E-1	4.23E-4	-5.87E-1	4.84E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.25E+0	4.29E-3	4.01E+0	5.27E+0	2.94E-3	1.51E-1	4.23E-4	-5.87E-1	4.84E+0
PENRE	MJ	2.77E+1	5.98E-1	9.21E-1	2.92E+1	2.18E-1	2.21E+0	1.22E-2	-1.46E+1	1.70E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.77E+1	5.98E-1	9.21E-1	2.92E+1	2.18E-1	2.21E+0	1.22E-2	-1.46E+1	1.70E+1
PET	MJ	2.89E+1	6.02E-1	4.93E+0	3.45E+1	2.21E-1	2.36E+0	1.26E-2	-1.52E+1	2.18E+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	1.82E-2	3.33E-5	7.88E-4	1.90E-2	2.32E-5	2.26E-3	1.40E-5	-8.44E-3	1.29E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.00E-5	6.22E-7	9.95E-6	1.01E-4	5.25E-7	3.35E-6	1.40E-8	-1.13E-5	9.32E-5
NHWD	kg	9.69E-2	5.21E-3	2.00E-3	1.04E-1	1.27E-2	7.53E-2	5.09E-2	-4.31E-2	2.00E-1
RWD	kg	5.03E-5	3.91E-6	2.64E-6	5.69E-5	1.40E-6	7.75E-6	7.47E-8	-2.30E-5	4.31E-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