

Environmental Profile

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

Ecochain v3.5.71



Product: 3024845 - OsmaS PVCU D Brch 90° GY 110x110 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

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	1.67E+0	7.22E-2	1.90E-1	1.93E+0	2.21E-2	6.11E-1	7.22E-3	-9.30E-1	1.64E+0
GWP-f	kg CO2 eq	1.66E+0	7.21E-2	1.86E-1	1.92E+0	2.21E-2	6.11E-1	7.22E-3	-9.23E-1	1.64E+0
GWP-b	kg CO2 eq	1.18E-2	-8.98E-6	3.51E-3	1.53E-2	1.34E-5	-6.31E-4	8.74E-6	-6.33E-3	8.33E-3
GWP-luluc	kg CO2 eq	1.34E-3	4.51E-5	1.77E-4	1.56E-3	7.81E-6	2.57E-4	1.86E-7	-5.81E-4	1.24E-3
ODP	kg CFC11 eq	8.50E-7	1.49E-8	1.48E-8	8.80E-7	5.08E-9	6.86E-8	2.60E-10	-4.46E-7	5.08E-7
AP	mol H+ eq	7.77E-3	1.97E-3	1.05E-3	1.08E-2	1.26E-4	1.19E-3	6.33E-6	-3.47E-3	8.64E-3
EP-fw	kg P eq	7.27E-5	3.54E-7	2.65E-6	7.57E-5	1.82E-7	8.53E-6	8.35E-9	-3.31E-5	5.13E-5
EP-m	kg N eq	1.29E-3	4.92E-4	1.92E-4	1.97E-3	4.50E-5	2.91E-4	4.27E-6	-6.00E-4	1.71E-3
EP-T	mol N eq	1.42E-2	5.47E-3	2.12E-3	2.17E-2	4.95E-4	3.20E-3	2.52E-5	-6.39E-3	1.91E-2
POCP	kg NMVOC eq	4.97E-3	1.43E-3	8.70E-4	7.27E-3	1.42E-4	9.63E-4	8.74E-6	-2.25E-3	6.13E-3
ADP-mm	kg Sb eq	9.01E-4	7.96E-7	5.12E-6	9.07E-4	5.71E-7	4.72E-6	6.37E-9	-1.84E-5	8.94E-4
ADP-f	MJ	4.35E+1	9.58E-1	2.06E+0	4.65E+1	3.39E-1	3.30E+0	1.90E-2	-2.28E+1	2.74E+1
WDP	m3 depriv.	2.62E+0	1.75E-3	5.88E-2	2.68E+0	1.04E-3	1.27E-1	1.33E-4	-1.30E+0	1.51E+0
PM	disease inc.	5.40E-8	3.06E-9	7.31E-9	6.43E-8	1.99E-9	1.50E-8	1.31E-10	-2.23E-8	5.92E-8
IR	kBq U-235 eq	9.40E-2	4.13E-3	4.64E-3	1.03E-1	1.48E-3	1.15E-2	8.73E-5	-4.18E-2	7.40E-2
ETP-fw	CTUe	3.46E+1	6.53E-1	5.83E+0	4.11E+1	2.75E-1	2.43E+1	2.69E-1	-1.24E+1	5.35E+1
HTP-c	CTUh	1.23E-9	3.91E-11	2.28E-10	1.49E-9	9.78E-12	3.74E-10	5.27E-13	-4.75E-10	1.40E-9
HTP-nc	CTUh	3.89E-8	5.91E-10	1.03E-8	4.98E-8	3.28E-10	8.68E-9	5.25E-11	-1.64E-8	4.25E-8
SQP	Pt	5.58E+0	2.86E-1	7.49E-1	6.62E+0	2.90E-1	2.06E+0	4.85E-2	-2.31E+0	6.71E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.04E+0	8.10E-3	1.27E+1	1.47E+1	4.86E-3	2.35E-1	7.07E-4	-9.43E-1	1.40E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.04E+0	8.10E-3	1.27E+1	1.47E+1	4.86E-3	2.35E-1	7.07E-4	-9.43E-1	1.40E+1
PENRE	MJ	4.67E+1	1.02E+0	2.19E+0	4.99E+1	3.59E-1	3.51E+0	2.02E-2	-2.46E+1	2.92E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.67E+1	1.02E+0	2.19E+0	4.99E+1	3.59E-1	3.51E+0	2.02E-2	-2.46E+1	2.92E+1
PET	MJ	4.87E+1	1.03E+0	1.49E+1	6.46E+1	3.64E-1	3.74E+0	2.09E-2	-2.55E+1	4.32E+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	3.00E-2	6.31E-5	1.77E-3	3.19E-2	3.83E-5	3.51E-3	2.32E-5	-1.37E-2	2.18E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.36E-4	1.23E-6	1.43E-5	1.51E-4	8.66E-7	5.33E-6	2.32E-8	-1.80E-5	1.39E-4
NHWD	kg	1.57E-1	1.51E-2	3.01E-3	1.75E-1	2.10E-2	1.22E-1	8.39E-2	-6.90E-2	3.34E-1
RWD	kg	8.61E-5	6.63E-6	3.78E-6	9.65E-5	2.30E-6	1.23E-5	1.24E-7	-3.68E-5	7.45E-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