

Environmental Profile

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

Ecochain v3.5.71



Product: 3036328 - OsmaS PVCU Top Offset Bend BK 110 SW/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	8.32E-1	3.38E-2	9.45E-2	9.61E-1	1.02E-2	3.33E-1	3.30E-3	-4.63E-1	8.45E-1
GWP-f	kg CO2 eq	8.27E-1	3.38E-2	9.25E-2	9.54E-1	1.02E-2	3.33E-1	3.30E-3	-4.59E-1	8.41E-1
GWP-b	kg CO2 eq	4.25E-3	-4.71E-6	1.93E-3	6.18E-3	6.20E-6	-2.87E-4	4.04E-6	-2.97E-3	2.93E-3
GWP-luluc	kg CO2 eq	6.66E-4	2.13E-5	8.50E-5	7.72E-4	3.61E-6	1.22E-4	8.54E-8	-2.73E-4	6.24E-4
ODP	kg CFC11 eq	4.08E-7	6.96E-9	7.65E-9	4.23E-7	2.35E-9	3.27E-8	1.20E-10	-2.12E-7	2.46E-7
AP	mol H+ eq	3.83E-3	9.37E-4	5.15E-4	5.28E-3	5.82E-5	5.69E-4	2.93E-6	-1.64E-3	4.27E-3
EP-fw	kg P eq	3.57E-5	1.64E-7	1.31E-6	3.72E-5	8.40E-8	4.04E-6	3.85E-9	-1.55E-5	2.58E-5
EP-m	kg N eq	6.44E-4	2.34E-4	9.63E-5	9.75E-4	2.08E-5	1.40E-4	1.93E-6	-2.87E-4	8.51E-4
EP-T	mol N eq	7.05E-3	2.60E-3	1.06E-3	1.07E-2	2.29E-4	1.54E-3	1.17E-5	-3.05E-3	9.43E-3
POCP	kg NMVOC eq	2.52E-3	6.77E-4	4.44E-4	3.64E-3	6.56E-5	4.61E-4	4.03E-6	-1.07E-3	3.10E-3
ADP-mm	kg Sb eq	4.42E-4	3.63E-7	2.46E-6	4.45E-4	2.64E-7	2.23E-6	2.94E-9	-8.60E-6	4.38E-4
ADP-f	MJ	2.19E+1	4.48E-1	1.02E+0	2.33E+1	1.57E-1	1.55E+0	8.79E-3	-1.11E+1	1.40E+1
WDP	m3 depriv.	1.27E+0	8.03E-4	2.98E-2	1.30E+0	4.81E-4	6.05E-2	6.02E-5	-6.09E-1	7.55E-1
PM	disease inc.	2.72E-8	1.40E-9	3.56E-9	3.22E-8	9.22E-10	7.10E-9	6.04E-11	-1.04E-8	2.99E-8
IR	kBq U-235 eq	4.59E-2	1.93E-3	2.37E-3	5.02E-2	6.85E-4	5.42E-3	4.04E-5	-1.97E-2	3.67E-2
ETP-fw	CTUe	1.70E+1	3.04E-1	2.83E+0	2.01E+1	1.27E-1	1.16E+1	1.28E-1	-5.86E+0	2.61E+1
HTP-c	CTUh	5.92E-10	1.84E-11	1.11E-10	7.21E-10	4.53E-12	1.80E-10	2.43E-13	-2.24E-10	6.82E-10
HTP-nc	CTUh	1.87E-8	2.72E-10	5.32E-9	2.43E-8	1.52E-10	4.15E-9	2.49E-11	-7.69E-9	2.10E-8
SQP	Pt	2.83E+0	1.28E-1	3.65E-1	3.32E+0	1.34E-1	9.69E-1	2.24E-2	-1.09E+0	3.35E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.01E+0	3.72E-3	6.08E+0	7.09E+0	2.25E-3	1.11E-1	3.26E-4	-4.42E-1	6.77E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.01E+0	3.72E-3	6.08E+0	7.09E+0	2.25E-3	1.11E-1	3.26E-4	-4.42E-1	6.77E+0
PENRE	MJ	2.34E+1	4.75E-1	1.09E+0	2.50E+1	1.66E-1	1.65E+0	9.32E-3	-1.20E+1	1.49E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.34E+1	4.75E-1	1.09E+0	2.50E+1	1.66E-1	1.65E+0	9.32E-3	-1.20E+1	1.49E+1
PET	MJ	2.44E+1	4.79E-1	7.17E+0	3.21E+1	1.69E-1	1.76E+0	9.65E-3	-1.24E+1	2.16E+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	1.48E-2	2.90E-5	8.88E-4	1.57E-2	1.77E-5	1.67E-3	1.07E-5	-6.41E-3	1.10E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.69E-5	5.62E-7	7.76E-6	7.53E-5	4.01E-7	2.52E-6	1.07E-8	-9.05E-6	6.91E-5
NHWD	kg	7.70E-2	6.59E-3	1.62E-3	8.52E-2	9.72E-3	5.95E-2	3.88E-2	-3.24E-2	1.61E-1
RWD	kg	4.23E-5	3.10E-6	2.06E-6	4.74E-5	1.07E-6	5.82E-6	5.71E-8	-1.74E-5	3.69E-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