

Environmental Profile

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

Ecochain v3.5.71



Product: 3036327 - OsmaS PVCU Bend 45° GY 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

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	8.07E-1	3.24E-2	9.23E-2	9.31E-1	9.85E-3	3.24E-1	3.19E-3	-4.47E-1	8.21E-1
GWP-f	kg CO2 eq	8.02E-1	3.24E-2	9.03E-2	9.25E-1	9.84E-3	3.25E-1	3.19E-3	-4.44E-1	8.18E-1
GWP-b	kg CO2 eq	3.95E-3	-4.35E-6	1.91E-3	5.86E-3	5.98E-6	-2.78E-4	3.89E-6	-2.86E-3	2.73E-3
GWP-luluc	kg CO2 eq	6.50E-4	2.04E-5	8.26E-5	7.53E-4	3.48E-6	1.16E-4	8.31E-8	-2.63E-4	6.11E-4
ODP	kg CFC11 eq	3.86E-7	6.68E-9	7.51E-9	4.00E-7	2.27E-9	3.12E-8	1.16E-10	-2.04E-7	2.30E-7
AP	mol H+ eq	3.75E-3	8.93E-4	5.02E-4	5.14E-3	5.61E-5	5.46E-4	2.82E-6	-1.58E-3	4.17E-3
EP-fw	kg P eq	3.47E-5	1.58E-7	1.27E-6	3.61E-5	8.10E-8	3.87E-6	3.73E-9	-1.49E-5	2.51E-5
EP-m	kg N eq	6.27E-4	2.23E-4	9.42E-5	9.45E-4	2.01E-5	1.34E-4	1.85E-6	-2.76E-4	8.24E-4
EP-T	mol N eq	6.90E-3	2.48E-3	1.04E-3	1.04E-2	2.21E-4	1.48E-3	1.13E-5	-2.94E-3	9.19E-3
POCP	kg NMVOC eq	2.45E-3	6.46E-4	4.35E-4	3.53E-3	6.32E-5	4.43E-4	3.89E-6	-1.03E-3	3.01E-3
ADP-mm	kg Sb eq	4.19E-4	3.52E-7	2.39E-6	4.21E-4	2.55E-7	2.14E-6	2.84E-9	-8.28E-6	4.16E-4
ADP-f	MJ	2.09E+1	4.30E-1	1.00E+0	2.23E+1	1.51E-1	1.49E+0	8.47E-3	-1.07E+1	1.32E+1
WDP	m3 depriv.	1.23E+0	7.75E-4	2.91E-2	1.26E+0	4.64E-4	5.78E-2	6.06E-5	-5.86E-1	7.30E-1
PM	disease inc.	2.60E-8	1.35E-9	3.47E-9	3.08E-8	8.89E-10	6.83E-9	5.83E-11	-1.00E-8	2.86E-8
IR	kBq U-235 eq	4.32E-2	1.85E-3	2.33E-3	4.74E-2	6.61E-4	5.20E-3	3.89E-5	-1.90E-2	3.43E-2
ETP-fw	CTUe	1.65E+1	2.92E-1	2.75E+0	1.95E+1	1.23E-1	1.11E+1	1.22E-1	-5.64E+0	2.52E+1
HTP-c	CTUh	5.76E-10	1.76E-11	1.08E-10	7.02E-10	4.37E-12	1.75E-10	2.36E-13	-2.16E-10	6.66E-10
HTP-nc	CTUh	1.82E-8	2.63E-10	5.21E-9	2.36E-8	1.46E-10	3.98E-9	2.38E-11	-7.41E-9	2.04E-8
SQP	Pt	2.75E+0	1.24E-1	3.56E-1	3.23E+0	1.29E-1	9.33E-1	2.16E-2	-1.05E+0	3.26E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.81E-1	3.59E-3	5.91E+0	6.89E+0	2.17E-3	1.06E-1	3.13E-4	-4.26E-1	6.58E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.81E-1	3.59E-3	5.91E+0	6.89E+0	2.17E-3	1.06E-1	3.13E-4	-4.26E-1	6.58E+0
PENRE	MJ	2.24E+1	4.56E-1	1.06E+0	2.39E+1	1.60E-1	1.59E+0	8.99E-3	-1.16E+1	1.41E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.24E+1	4.56E-1	1.06E+0	2.39E+1	1.60E-1	1.59E+0	8.99E-3	-1.16E+1	1.41E+1
PET	MJ	2.34E+1	4.60E-1	6.97E+0	3.08E+1	1.63E-1	1.69E+0	9.30E-3	-1.20E+1	2.07E+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	1.45E-2	2.80E-5	8.68E-4	1.54E-2	1.71E-5	1.60E-3	1.04E-5	-6.18E-3	1.08E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.35E-5	5.44E-7	7.66E-6	7.17E-5	3.86E-7	2.42E-6	1.04E-8	-8.75E-6	6.57E-5
NHWD	kg	7.62E-2	6.49E-3	1.60E-3	8.43E-2	9.37E-3	5.75E-2	3.74E-2	-3.12E-2	1.57E-1
RWD	kg	3.89E-5	2.97E-6	2.03E-6	4.39E-5	1.03E-6	5.59E-6	5.51E-8	-1.68E-5	3.38E-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



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