

Environmental Profile

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

Ecochain v3.5.71



Product: 3040899 - OsmaS PVCU Bend 90° GY 160 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

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.82E+0	1.21E-1	4.26E-2	2.98E+0	3.78E-2	1.03E+0	1.19E-2	-1.58E+0	2.48E+0
GWP-f	kg CO2 eq	2.79E+0	1.21E-1	4.10E-2	2.95E+0	3.77E-2	1.03E+0	1.19E-2	-1.56E+0	2.47E+0
GWP-b	kg CO2 eq	2.45E-2	-2.58E-5	1.52E-3	2.60E-2	2.29E-5	-1.04E-3	1.49E-5	-1.11E-2	1.40E-2
GWP-luluc	kg CO2 eq	2.33E-3	7.98E-5	2.76E-5	2.44E-3	1.34E-5	4.64E-4	3.18E-7	-1.03E-3	1.89E-3
ODP	kg CFC11 eq	1.55E-6	2.47E-8	4.43E-9	1.58E-6	8.70E-9	1.27E-7	4.45E-10	-7.96E-7	9.23E-7
AP	mol H+ eq	1.30E-2	3.62E-3	2.05E-4	1.68E-2	2.15E-4	2.13E-3	1.08E-5	-5.98E-3	1.32E-2
EP-fw	kg P eq	1.27E-4	5.46E-7	5.46E-7	1.28E-4	3.11E-7	1.55E-5	1.43E-8	-5.84E-5	8.59E-5
EP-m	kg N eq	2.18E-3	8.98E-4	4.63E-5	3.13E-3	7.69E-5	5.14E-4	6.62E-6	-1.03E-3	2.69E-3
EP-T	mol N eq	2.37E-2	9.98E-3	4.90E-4	3.42E-2	8.48E-4	5.66E-3	4.31E-5	-1.10E-2	2.98E-2
POCP	kg NMVOC eq	8.04E-3	2.59E-3	2.40E-4	1.09E-2	2.42E-4	1.70E-3	1.48E-5	-3.81E-3	9.02E-3
ADP-mm	kg Sb eq	1.61E-3	1.12E-6	7.88E-7	1.61E-3	9.77E-7	8.43E-6	1.09E-8	-3.24E-5	1.59E-3
ADP-f	MJ	7.10E+1	1.58E+0	4.52E-1	7.31E+1	5.79E-1	5.84E+0	3.25E-2	-3.82E+1	4.14E+1
WDP	m3 depriv.	4.71E+0	2.60E-3	1.52E-2	4.73E+0	1.78E-3	2.33E-1	2.32E-4	-2.28E+0	2.68E+0
PM	disease inc.	8.39E-8	4.44E-9	1.34E-9	8.97E-8	3.41E-9	2.64E-8	2.23E-10	-3.79E-8	8.18E-8
IR	kBq U-235 eq	1.54E-1	6.79E-3	1.30E-3	1.63E-1	2.53E-3	2.05E-2	1.49E-4	-7.36E-2	1.12E-1
ETP-fw	CTUe	6.05E+1	1.05E+0	1.01E+0	6.25E+1	4.71E-1	4.54E+1	5.03E-1	-2.20E+1	8.69E+1
HTP-c	CTUh	2.15E-9	6.72E-11	3.98E-11	2.26E-9	1.67E-11	6.59E-10	9.07E-13	-8.36E-10	2.10E-9
HTP-nc	CTUh	6.96E-8	8.96E-10	3.00E-9	7.35E-8	5.61E-10	1.57E-8	9.68E-11	-2.90E-8	6.09E-8
SQP	Pt	8.89E+0	3.46E-1	1.37E-1	9.37E+0	4.96E-1	3.59E+0	8.29E-2	-4.06E+0	9.48E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.51E+0	1.20E-2	1.88E+0	5.40E+0	8.31E-3	4.25E-1	1.19E-3	-1.66E+0	4.18E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.51E+0	1.20E-2	1.88E+0	5.40E+0	8.31E-3	4.25E-1	1.19E-3	-1.66E+0	4.18E+0
PENRE	MJ	7.62E+1	1.68E+0	4.80E-1	7.84E+1	6.15E-1	6.21E+0	3.45E-2	-4.11E+1	4.41E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	7.62E+1	1.68E+0	4.80E-1	7.84E+1	6.15E-1	6.21E+0	3.45E-2	-4.11E+1	4.41E+1
PET	MJ	7.97E+1	1.69E+0	2.36E+0	8.38E+1	6.23E-1	6.64E+0	3.56E-2	-4.28E+1	4.83E+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	5.15E-2	9.34E-5	4.18E-4	5.20E-2	6.56E-5	6.36E-3	3.97E-5	-2.38E-2	3.46E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.50E-4	1.74E-6	5.82E-6	2.58E-4	1.48E-6	9.42E-6	3.97E-8	-3.16E-5	2.37E-4
NHWD	kg	2.67E-1	1.46E-2	1.16E-3	2.83E-1	3.59E-2	2.11E-1	1.44E-1	-1.22E-1	5.53E-1
RWD	kg	1.34E-4	1.10E-5	1.54E-6	1.47E-4	3.94E-6	2.18E-5	2.11E-7	-6.48E-5	1.08E-4
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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