

Environmental Profile

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

Ecochain v3.5.71



Product: 3036640 - OsmaS PVCU Bossed Acc Pipe 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

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.37E+0	5.86E-2	1.51E-1	1.58E+0	1.82E-2	5.04E-1	5.70E-3	-7.63E-1	1.34E+0
GWP-f	kg CO2 eq	1.36E+0	5.86E-2	1.48E-1	1.56E+0	1.82E-2	5.05E-1	5.70E-3	-7.58E-1	1.33E+0
GWP-b	kg CO2 eq	1.16E-2	-1.24E-5	3.05E-3	1.47E-2	1.10E-5	-4.97E-4	7.15E-6	-5.31E-3	8.88E-3
GWP-luluc	kg CO2 eq	1.13E-3	3.85E-5	1.36E-4	1.30E-3	6.43E-6	2.23E-4	1.52E-7	-4.93E-4	1.04E-3
ODP	kg CFC11 eq	7.57E-7	1.19E-8	1.22E-8	7.81E-7	4.19E-9	6.10E-8	2.14E-10	-3.83E-7	4.63E-7
AP	mol H+ eq	6.30E-3	1.75E-3	8.23E-4	8.87E-3	1.04E-4	1.03E-3	5.21E-6	-2.88E-3	7.12E-3
EP-fw	kg P eq	6.16E-5	2.64E-7	2.09E-6	6.39E-5	1.50E-7	7.46E-6	6.85E-9	-2.81E-5	4.35E-5
EP-m	kg N eq	1.06E-3	4.33E-4	1.54E-4	1.65E-3	3.70E-5	2.48E-4	3.20E-6	-4.98E-4	1.44E-3
EP-T	mol N eq	1.15E-2	4.81E-3	1.69E-3	1.80E-2	4.08E-4	2.73E-3	2.08E-5	-5.29E-3	1.59E-2
POCP	kg NMVOC eq	3.94E-3	1.25E-3	7.07E-4	5.90E-3	1.17E-4	8.19E-4	7.13E-6	-1.84E-3	5.00E-3
ADP-mm	kg Sb eq	8.29E-4	5.44E-7	3.93E-6	8.34E-4	4.70E-7	4.06E-6	5.24E-9	-1.56E-5	8.23E-4
ADP-f	MJ	3.50E+1	7.64E-1	1.63E+0	3.74E+1	2.79E-1	2.81E+0	1.56E-2	-1.84E+1	2.21E+1
WDP	m3 depriv.	2.27E+0	1.26E-3	4.74E-2	2.31E+0	8.56E-4	1.12E-1	1.10E-4	-1.10E+0	1.33E+0
PM	disease inc.	4.22E-8	2.15E-9	5.70E-9	5.00E-8	1.64E-9	1.27E-8	1.08E-10	-1.82E-8	4.63E-8
IR	kBq U-235 eq	7.69E-2	3.28E-3	3.77E-3	8.40E-2	1.22E-3	9.88E-3	7.16E-5	-3.54E-2	5.98E-2
ETP-fw	CTUe	2.96E+1	5.07E-1	4.52E+0	3.46E+1	2.27E-1	2.19E+1	2.43E-1	-1.06E+1	4.64E+1
HTP-c	CTUh	1.05E-9	3.25E-11	1.77E-10	1.26E-9	8.06E-12	3.17E-10	4.35E-13	-4.02E-10	1.18E-9
HTP-nc	CTUh	3.38E-8	4.34E-10	8.45E-9	4.27E-8	2.70E-10	7.59E-9	4.67E-11	-1.39E-8	3.67E-8
SQP	Pt	4.46E+0	1.68E-1	5.83E-1	5.21E+0	2.39E-1	1.73E+0	3.99E-2	-1.96E+0	5.27E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.70E+0	5.83E-3	9.73E+0	1.14E+1	4.00E-3	2.05E-1	5.75E-4	-7.97E-1	1.08E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.70E+0	5.83E-3	9.73E+0	1.14E+1	4.00E-3	2.05E-1	5.75E-4	-7.97E-1	1.08E+1
PENRE	MJ	3.75E+1	8.11E-1	1.73E+0	4.01E+1	2.96E-1	2.99E+0	1.66E-2	-1.99E+1	2.35E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.75E+1	8.11E-1	1.73E+0	4.01E+1	2.96E-1	2.99E+0	1.66E-2	-1.99E+1	2.35E+1
PET	MJ	3.92E+1	8.17E-1	1.15E+1	5.15E+1	3.00E-1	3.20E+0	1.72E-2	-2.07E+1	3.44E+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	2.47E-2	4.53E-5	1.42E-3	2.62E-2	3.16E-5	3.07E-3	1.91E-5	-1.15E-2	1.78E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.28E-4	8.46E-7	1.23E-5	1.41E-4	7.14E-7	4.54E-6	1.91E-8	-1.53E-5	1.31E-4
NHWD	kg	1.31E-1	7.15E-3	2.57E-3	1.41E-1	1.73E-2	1.02E-1	6.92E-2	-5.84E-2	2.71E-1
RWD	kg	6.87E-5	5.30E-6	3.25E-6	7.72E-5	1.90E-6	1.05E-5	1.02E-7	-3.12E-5	5.85E-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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