

Environmental Profile

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

Ecochain v3.5.71



Product: 3035536 - OsmaS PVCU Balloon Grating WT 110
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	2.01E-1	2.30E-3	1.39E-2	2.17E-1	2.37E-3	7.20E-2	1.08E-3	-9.59E-2	1.97E-1
GWP-f	kg CO2 eq	1.94E-1	2.29E-3	1.35E-2	2.09E-1	2.37E-3	7.20E-2	1.08E-3	-9.51E-2	1.90E-1
GWP-b	kg CO2 eq	6.83E-3	1.39E-6	4.43E-4	7.27E-3	1.44E-6	-9.53E-5	7.82E-7	-7.07E-4	6.47E-3
GWP-luluc	kg CO2 eq	6.31E-4	8.12E-7	9.94E-6	6.42E-4	8.38E-7	1.33E-5	4.35E-8	-6.55E-5	5.91E-4
ODP	kg CFC11 eq	1.51E-8	5.29E-10	1.37E-9	1.70E-8	5.46E-10	1.75E-9	2.95E-11	-5.04E-8	-3.10E-8
AP	mol H+ eq	1.99E-3	1.31E-5	6.93E-5	2.07E-3	1.35E-5	7.15E-5	8.13E-7	-3.79E-4	1.78E-3
EP-fw	kg P eq	2.13E-5	1.89E-8	1.82E-7	2.15E-5	1.95E-8	3.85E-7	1.64E-9	-3.73E-6	1.82E-5
EP-m	kg N eq	4.00E-4	4.68E-6	1.49E-5	4.20E-4	4.83E-6	2.05E-5	2.74E-7	-6.49E-5	3.80E-4
EP-T	mol N eq	4.99E-3	5.15E-5	1.59E-4	5.20E-3	5.32E-5	2.25E-4	3.03E-6	-6.89E-4	4.79E-3
POCP	kg NMVOC eq	1.15E-3	1.47E-5	7.51E-5	1.23E-3	1.52E-5	7.11E-5	1.10E-6	-2.40E-4	1.08E-3
ADP-mm	kg Sb eq	4.33E-3	5.93E-8	2.85E-7	4.33E-3	6.13E-8	2.91E-7	1.02E-9	-2.07E-6	4.33E-3
ADP-f	MJ	2.89E+0	3.52E-2	1.49E-1	3.08E+0	3.64E-2	2.33E-1	2.24E-3	-2.36E+0	9.89E-1
WDP	m3 depriv.	2.14E-1	1.08E-4	4.82E-3	2.19E-1	1.12E-4	4.28E-3	9.65E-5	-1.46E-1	7.77E-2
PM	disease inc.	8.91E-9	2.07E-10	4.62E-10	9.58E-9	2.14E-10	1.19E-9	1.55E-11	-2.41E-9	8.59E-9
IR	kBq U-235 eq	1.92E-2	1.54E-4	4.05E-4	1.98E-2	1.59E-4	7.01E-4	8.83E-6	-4.69E-3	1.60E-2
ETP-fw	CTUe	4.14E+1	2.86E-2	3.53E-1	4.18E+1	2.95E-2	2.63E-1	1.86E-3	-1.40E+0	4.07E+1
HTP-c	CTUh	9.82E-10	1.02E-12	1.39E-11	9.97E-10	1.05E-12	8.05E-11	1.18E-13	-5.32E-11	1.03E-9
HTP-nc	CTUh	2.91E-8	3.41E-11	9.29E-10	3.00E-8	3.52E-11	5.17E-10	1.59E-12	-1.85E-9	2.87E-8
SQP	Pt	1.61E+0	3.01E-2	4.72E-2	1.68E+0	3.11E-2	1.86E-1	5.34E-3	-2.58E-1	1.65E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.04E-1	5.05E-4	6.88E-1	1.09E+0	5.22E-4	1.14E-2	3.89E-5	-1.06E-1	9.99E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.04E-1	5.05E-4	6.88E-1	1.09E+0	5.22E-4	1.14E-2	3.89E-5	-1.06E-1	9.99E-1
PENRE	MJ	3.08E+0	3.74E-2	1.58E-1	3.27E+0	3.86E-2	2.49E-1	2.38E-3	-2.54E+0	1.02E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.08E+0	3.74E-2	1.58E-1	3.27E+0	3.86E-2	2.49E-1	2.38E-3	-2.54E+0	1.02E+0
PET	MJ	3.48E+0	3.79E-2	8.46E-1	4.37E+0	3.91E-2	2.60E-1	2.42E-3	-2.65E+0	2.02E+0
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	6.29E-3	3.98E-6	1.35E-4	6.43E-3	4.12E-6	1.28E-4	2.35E-6	-1.52E-3	5.04E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.50E-4	9.01E-8	1.71E-6	5.52E-4	9.30E-8	4.24E-7	3.44E-9	-1.92E-6	5.51E-4
NHWD	kg	3.58E-2	2.18E-3	3.43E-4	3.84E-2	2.25E-3	1.21E-2	9.02E-3	-7.75E-3	5.40E-2
RWD	kg	1.40E-5	2.39E-7	4.52E-7	1.47E-5	2.47E-7	8.90E-7	1.34E-8	-4.12E-6	1.17E-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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