

Environmental Profile

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

Ecochain v3.5.71



Product: 3032467 - OsmaS PVCU Reducer GY 110x55 S/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	3.99E-1	1.62E-2	4.83E-2	4.63E-1	5.11E-3	1.57E-1	1.66E-3	-2.20E-1	4.06E-1
GWP-f	kg CO2 eq	3.96E-1	1.62E-2	4.73E-2	4.59E-1	5.11E-3	1.57E-1	1.66E-3	-2.19E-1	4.04E-1
GWP-b	kg CO2 eq	2.82E-3	-2.93E-6	9.95E-4	3.81E-3	3.10E-6	-1.40E-4	2.03E-6	-1.46E-3	2.21E-3
GWP-luluc	kg CO2 eq	3.26E-4	1.05E-5	4.33E-5	3.79E-4	1.81E-6	6.08E-5	4.40E-8	-1.35E-4	3.07E-4
ODP	kg CFC11 eq	2.03E-7	3.31E-9	3.93E-9	2.10E-7	1.18E-9	1.64E-8	6.08E-11	-1.05E-7	1.23E-7
AP	mol H+ eq	1.86E-3	4.69E-4	2.63E-4	2.60E-3	2.91E-5	2.83E-4	1.48E-6	-8.04E-4	2.11E-3
EP-fw	kg P eq	1.75E-5	7.53E-8	6.68E-7	1.82E-5	4.20E-8	2.02E-6	1.97E-9	-7.69E-6	1.26E-5
EP-m	kg N eq	3.12E-4	1.17E-4	4.93E-5	4.77E-4	1.04E-5	6.89E-5	9.40E-7	-1.40E-4	4.18E-4
EP-T	mol N eq	3.43E-3	1.29E-3	5.42E-4	5.27E-3	1.15E-4	7.60E-4	5.90E-6	-1.49E-3	4.66E-3
POCP	kg NMVOC eq	1.18E-3	3.37E-4	2.28E-4	1.74E-3	3.28E-5	2.27E-4	2.04E-6	-5.21E-4	1.48E-3
ADP-mm	kg Sb eq	2.32E-4	1.60E-7	1.25E-6	2.33E-4	1.32E-7	1.11E-6	1.50E-9	-4.40E-6	2.30E-4
ADP-f	MJ	1.01E+1	2.13E-1	5.23E-1	1.09E+1	7.84E-2	7.73E-1	4.44E-3	-5.32E+0	6.40E+0
WDP	m3 depriv.	6.30E-1	3.64E-4	1.52E-2	6.45E-1	2.41E-4	3.04E-2	3.36E-5	-3.01E-1	3.75E-1
PM	disease inc.	1.27E-8	6.27E-10	1.82E-9	1.51E-8	4.61E-10	3.51E-9	3.05E-11	-5.12E-9	1.40E-8
IR	kBq U-235 eq	2.15E-2	9.15E-4	1.22E-3	2.36E-2	3.43E-4	2.70E-3	2.03E-5	-9.75E-3	1.69E-2
ETP-fw	CTUe	8.53E+0	1.42E-1	1.44E+0	1.01E+1	6.37E-2	5.86E+0	6.48E-2	-2.90E+0	1.32E+1
HTP-c	CTUh	3.00E-10	8.91E-12	5.66E-11	3.66E-10	2.27E-12	8.99E-11	1.25E-13	-1.11E-10	3.48E-10
HTP-nc	CTUh	9.49E-9	1.24E-10	2.73E-9	1.23E-8	7.59E-11	2.07E-9	1.26E-11	-3.81E-9	1.07E-8
SQP	Pt	1.33E+0	5.27E-2	1.86E-1	1.57E+0	6.71E-2	4.80E-1	1.13E-2	-5.40E-1	1.59E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.84E-1	1.68E-3	3.10E+0	3.58E+0	1.12E-3	5.57E-2	1.63E-4	-2.19E-1	3.42E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.84E-1	1.68E-3	3.10E+0	3.58E+0	1.12E-3	5.57E-2	1.63E-4	-2.19E-1	3.42E+0
PENRE	MJ	1.09E+1	2.26E-1	5.56E-1	1.16E+1	8.32E-2	8.23E-1	4.71E-3	-5.73E+0	6.82E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.09E+1	2.26E-1	5.56E-1	1.16E+1	8.32E-2	8.23E-1	4.71E-3	-5.73E+0	6.82E+0
PET	MJ	1.13E+1	2.27E-1	3.65E+0	1.52E+1	8.44E-2	8.78E-1	4.87E-3	-5.95E+0	1.02E+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	7.18E-3	1.31E-5	4.54E-4	7.65E-3	8.87E-6	8.43E-4	5.42E-6	-3.17E-3	5.34E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.51E-5	2.49E-7	4.00E-6	3.93E-5	2.01E-7	1.26E-6	5.44E-9	-4.34E-6	3.64E-5
NHWD	kg	3.88E-2	2.48E-3	8.34E-4	4.21E-2	4.86E-3	2.88E-2	1.96E-2	-1.60E-2	7.94E-2
RWD	kg	1.91E-5	1.47E-6	1.06E-6	2.16E-5	5.33E-7	2.89E-6	2.88E-8	-8.62E-6	1.65E-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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