

Environmental Profile

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

Ecochain v3.5.71



Product: 3031980 - OsmaS PVCU Reducer E 160x110 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	1.24E+0	1.13E-2	9.06E-2	1.34E+0	1.51E-2	4.24E-1	6.83E-3	-5.88E-1	1.20E+0
GWP-f	kg CO2 eq	1.19E+0	1.13E-2	8.76E-2	1.29E+0	1.51E-2	4.24E-1	6.84E-3	-5.83E-1	1.15E+0
GWP-b	kg CO2 eq	4.44E-2	6.87E-6	2.88E-3	4.73E-2	9.14E-6	-6.06E-4	4.97E-6	-4.48E-3	4.22E-2
GWP-luluc	kg CO2 eq	3.98E-3	4.00E-6	6.46E-5	4.05E-3	5.33E-6	8.45E-5	2.76E-7	-4.15E-4	3.72E-3
ODP	kg CFC11 eq	9.50E-8	2.61E-9	8.89E-9	1.07E-7	3.47E-9	1.10E-8	1.87E-10	-3.18E-7	-1.97E-7
AP	mol H+ eq	1.25E-2	6.44E-5	4.50E-4	1.30E-2	8.58E-5	4.49E-4	5.17E-6	-2.39E-3	1.11E-2
EP-fw	kg P eq	1.34E-4	9.31E-8	1.18E-6	1.36E-4	1.24E-7	2.44E-6	1.04E-8	-2.37E-5	1.14E-4
EP-m	kg N eq	2.51E-3	2.31E-5	9.68E-5	2.63E-3	3.07E-5	1.28E-4	1.74E-6	-4.07E-4	2.38E-3
EP-T	mol N eq	3.13E-2	2.54E-4	1.04E-3	3.26E-2	3.38E-4	1.40E-3	1.92E-5	-4.32E-3	3.01E-2
POCP	kg NMVOC eq	7.12E-3	7.26E-5	4.88E-4	7.68E-3	9.67E-5	4.45E-4	7.01E-6	-1.50E-3	6.72E-3
ADP-mm	kg Sb eq	2.75E-2	2.93E-7	1.85E-6	2.75E-2	3.90E-7	1.84E-6	6.47E-9	-1.32E-5	2.75E-2
ADP-f	MJ	1.73E+1	1.74E-1	9.67E-1	1.84E+1	2.31E-1	1.48E+0	1.42E-2	-1.46E+1	5.54E+0
WDP	m3 depriv.	1.33E+0	5.33E-4	3.13E-2	1.36E+0	7.09E-4	2.71E-2	6.13E-4	-9.27E-1	4.66E-1
PM	disease inc.	5.52E-8	1.02E-9	3.00E-9	5.92E-8	1.36E-9	7.51E-9	9.85E-11	-1.53E-8	5.29E-8
IR	kBq U-235 eq	1.21E-1	7.59E-4	2.63E-3	1.24E-1	1.01E-3	4.43E-3	5.61E-5	-2.97E-2	1.00E-1
ETP-fw	CTUe	2.62E+2	1.41E-1	2.30E+0	2.65E+2	1.88E-1	1.66E+0	1.18E-2	-8.85E+0	2.58E+2
HTP-c	CTUh	6.23E-9	5.02E-12	9.02E-11	6.33E-9	6.68E-12	5.08E-10	7.50E-13	-3.36E-10	6.51E-9
HTP-nc	CTUh	1.84E-7	1.68E-10	6.04E-9	1.91E-7	2.24E-10	3.25E-9	1.01E-11	-1.17E-8	1.82E-7
SQP	Pt	1.00E+1	1.49E-1	3.07E-1	1.05E+1	1.98E-1	1.18E+0	3.39E-2	-1.63E+0	1.03E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.52E+0	2.49E-3	4.47E+0	7.00E+0	3.32E-3	7.22E-2	2.47E-4	-6.71E-1	6.40E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.52E+0	2.49E-3	4.47E+0	7.00E+0	3.32E-3	7.22E-2	2.47E-4	-6.71E-1	6.40E+0
PENRE	MJ	1.84E+1	1.84E-1	1.03E+0	1.96E+1	2.45E-1	1.57E+0	1.51E-2	-1.57E+1	5.72E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.84E+1	1.84E-1	1.03E+0	1.96E+1	2.45E-1	1.57E+0	1.51E-2	-1.57E+1	5.72E+0
PET	MJ	2.09E+1	1.87E-1	5.50E+0	2.66E+1	2.49E-1	1.65E+0	1.54E-2	-1.64E+1	1.21E+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	3.93E-2	1.97E-5	8.78E-4	4.02E-2	2.62E-5	8.07E-4	1.49E-5	-9.63E-3	3.14E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.50E-3	4.44E-7	1.11E-5	3.51E-3	5.91E-7	2.68E-6	2.18E-8	-1.18E-5	3.50E-3
NHWD	kg	2.25E-1	1.08E-2	2.23E-3	2.38E-1	1.43E-2	7.51E-2	5.73E-2	-4.91E-2	3.35E-1
RWD	kg	8.82E-5	1.18E-6	2.94E-6	9.23E-5	1.57E-6	5.62E-6	8.54E-8	-2.60E-5	7.36E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777