

Environmental Profile

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

Ecochain v3.5.71



Product: 3043030 - OsmaS Stainless Steel Tile&Grid GY 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

This document and supporting material contain confidential and proprietary business information of Wavin - UK - Chippenham - Verified. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - UK - Chippenham - Verified.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	9.62E-2	4.35E-4	3.85E-2	1.35E-1	0	3.16E-2	0	-3.00E-2	1.37E-1
GWP-f	kg CO2 eq	9.65E-2	4.34E-4	3.72E-2	1.34E-1	0	3.17E-2	0	-3.01E-2	1.36E-1
GWP-b	kg CO2 eq	-3.99E-4	2.64E-7	1.22E-3	8.23E-4	0	-1.32E-5	0	9.38E-5	9.04E-4
GWP-luluc	kg CO2 eq	7.56E-5	1.54E-7	2.74E-5	1.03E-4	0	6.28E-7	0	6.45E-6	1.10E-4
ODP	kg CFC11 eq	4.88E-9	1.00E-10	3.78E-9	8.76E-9	0	1.91E-10	0	-2.26E-9	6.68E-9
AP	mol H+ eq	5.24E-4	2.47E-6	1.91E-4	7.18E-4	0	9.91E-6	0	-5.58E-5	6.72E-4
EP-fw	kg P eq	3.71E-6	3.57E-9	5.03E-7	4.21E-6	0	2.74E-8	0	-4.02E-7	3.84E-6
EP-m	kg N eq	8.94E-5	8.85E-7	4.11E-5	1.31E-4	0	3.45E-6	0	-1.23E-5	1.23E-4
EP-T	mol N eq	1.04E-3	9.76E-6	4.40E-4	1.49E-3	0	3.87E-5	0	-1.40E-4	1.39E-3
POCP	kg NMVOC eq	3.65E-4	2.79E-6	2.07E-4	5.76E-4	0	1.07E-5	0	-7.72E-5	5.09E-4
ADP-mm	kg Sb eq	3.36E-6	1.12E-8	7.87E-7	4.16E-6	0	3.00E-8	0	-1.90E-8	4.17E-6
ADP-f	MJ	1.70E+0	6.67E-3	4.11E-1	2.12E+0	0	1.47E-2	0	-4.19E-1	1.72E+0
WDP	m3 depriv.	3.85E-2	2.05E-5	1.33E-2	5.18E-2	0	1.53E-4	0	-3.54E-3	4.85E-2
PM	disease inc.	5.87E-9	3.92E-11	1.28E-9	7.19E-9	0	1.21E-10	0	-6.53E-10	6.66E-9
IR	kBq U-235 eq	3.37E-3	2.91E-5	1.12E-3	4.52E-3	0	6.13E-5	0	5.58E-5	4.64E-3
ETP-fw	CTUe	2.32E+0	5.41E-3	9.75E-1	3.30E+0	0	3.06E-2	0	-3.68E-1	2.96E+0
HTP-c	CTUh	7.83E-10	1.93E-13	3.83E-11	8.21E-10	0	4.50E-12	0	-2.79E-12	8.23E-10
HTP-nc	CTUh	2.68E-9	6.45E-12	2.57E-9	5.25E-9	0	5.62E-11	0	1.94E-9	7.24E-9
SQP	Pt	5.16E-1	5.70E-3	1.30E-1	6.52E-1	0	1.62E-2	0	-2.53E-2	6.43E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.92E-1	9.56E-5	1.90E+0	2.09E+0	0	8.32E-4	0	6.18E-4	2.09E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.92E-1	9.56E-5	1.90E+0	2.09E+0	0	8.32E-4	0	6.18E-4	2.09E+0
PENRE	MJ	1.82E+0	7.08E-3	4.36E-1	2.26E+0	0	1.56E-2	0	-4.59E-1	1.82E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.82E+0	7.08E-3	4.36E-1	2.26E+0	0	1.56E-2	0	-4.59E-1	1.82E+0
PET	MJ	2.01E+0	7.17E-3	2.34E+0	4.36E+0	0	1.64E-2	0	-4.58E-1	3.92E+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	1.03E-3	7.54E-7	3.73E-4	1.40E-3	0	9.52E-6	0	-6.78E-5	1.35E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.70E-6	1.70E-8	4.71E-6	6.43E-6	0	4.12E-8	0	-1.60E-6	4.87E-6
NHWD	kg	5.98E-2	4.13E-4	9.47E-4	6.11E-2	0	2.12E-3	0	-1.14E-3	6.21E-2
RWD	kg	3.04E-6	4.53E-8	1.25E-6	4.33E-6	0	8.54E-8	0	-8.74E-8	4.33E-6
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