

Environmental Profile

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

Ecochain v3.5.71



Product: 3043070 - OsmaDrain Spare Top-4A22A BK 110 P/E
Unit: 1 piece
Manufacturer: Wavin - UK - Chippenham - Verified

Wavin OsmaDrain - the definitive & comprehensive PVC-U gravity drainage system for residential, commercial & industrial projects. The source for all types of gravity drainage, sewer installation & pressure pipe systems in any private or public development. One of the UK's most trusted & leading names in plastic drainage systems.

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	1.35E+0	2.93E-2	3.93E-1	1.78E+0	1.76E-2	5.11E-1	8.28E-3	-7.61E-1	1.55E+0
GWP-f	kg CO2 eq	1.34E+0	2.93E-2	3.89E-1	1.76E+0	1.76E-2	5.11E-1	8.28E-3	-7.59E-1	1.54E+0
GWP-b	kg CO2 eq	1.02E-2	1.76E-5	3.05E-3	1.32E-2	1.07E-5	-7.32E-4	7.21E-6	-2.33E-3	1.02E-2
GWP-luluc	kg CO2 eq	4.16E-4	1.04E-5	4.35E-4	8.61E-4	6.21E-6	9.93E-5	1.40E-7	-1.27E-4	8.40E-4
ODP	kg CFC11 eq	6.21E-8	6.74E-9	2.43E-8	9.32E-8	4.05E-9	1.30E-8	2.08E-10	-3.25E-8	7.79E-8
AP	mol H+ eq	5.18E-3	1.74E-4	2.35E-3	7.70E-3	1.00E-4	5.48E-4	4.95E-6	-2.11E-3	6.24E-3
EP-fw	kg P eq	2.33E-5	2.40E-7	5.76E-6	2.93E-5	1.44E-7	2.88E-6	6.44E-9	-8.80E-6	2.35E-5
EP-m	kg N eq	8.47E-4	6.13E-5	3.78E-4	1.29E-3	3.58E-5	1.59E-4	3.23E-6	-3.76E-4	1.11E-3
EP-T	mol N eq	9.52E-3	6.75E-4	4.31E-3	1.45E-2	3.94E-4	1.75E-3	2.01E-5	-4.17E-3	1.25E-2
POCP	kg NMVOC eq	4.21E-3	1.92E-4	1.54E-3	5.94E-3	1.13E-4	5.53E-4	7.54E-6	-1.95E-3	4.67E-3
ADP-mm	kg Sb eq	1.82E-5	7.53E-7	1.26E-5	3.16E-5	4.54E-7	2.18E-6	4.98E-9	-4.86E-6	2.93E-5
ADP-f	MJ	4.56E+1	4.49E-1	4.32E+0	5.04E+1	2.70E-1	1.73E+0	1.52E-2	-2.31E+1	2.93E+1
WDP	m3 depriv.	8.45E-1	1.37E-3	1.10E-1	9.56E-1	8.27E-4	3.36E-2	7.51E-5	-4.02E-1	5.89E-1
PM	disease inc.	5.30E-8	2.63E-9	1.68E-8	7.24E-8	1.58E-9	9.01E-9	1.04E-10	-1.81E-8	6.51E-8
IR	kBq U-235 eq	3.66E-2	1.96E-3	8.11E-3	4.67E-2	1.18E-3	5.23E-3	7.03E-5	-1.05E-2	4.27E-2
ETP-fw	CTUe	1.09E+1	3.64E-1	1.37E+1	2.51E+1	2.19E-1	1.97E+0	1.27E-2	-3.56E+0	2.37E+1
HTP-c	CTUh	1.82E-9	1.30E-11	5.38E-10	2.37E-9	7.79E-12	2.33E-10	3.69E-13	-1.26E-10	2.48E-9
HTP-nc	CTUh	1.24E-8	4.33E-10	1.75E-8	3.03E-8	2.61E-10	2.91E-9	8.16E-12	4.27E-10	3.39E-8
SQP	Pt	2.31E+0	3.82E-1	1.72E+0	4.42E+0	2.31E-1	1.39E+0	3.89E-2	-6.59E-1	5.42E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.41E-1	6.42E-3	3.18E+1	3.27E+1	3.87E-3	8.55E-2	5.87E-4	-2.82E-1	3.25E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.41E-1	6.42E-3	3.18E+1	3.27E+1	3.87E-3	8.55E-2	5.87E-4	-2.82E-1	3.25E+1
PENRE	MJ	4.89E+1	4.77E-1	4.59E+0	5.40E+1	2.86E-1	1.84E+0	1.61E-2	-2.49E+1	3.13E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.89E+1	4.77E-1	4.59E+0	5.40E+1	2.86E-1	1.84E+0	1.61E-2	-2.49E+1	3.13E+1
PET	MJ	4.99E+1	4.83E-1	3.64E+1	8.67E+1	2.90E-1	1.93E+0	1.67E-2	-2.51E+1	6.38E+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	1.32E-2	5.06E-5	3.56E-3	1.68E-2	3.05E-5	9.91E-4	1.87E-5	-5.99E-3	1.19E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.06E-6	1.14E-6	1.45E-5	2.37E-5	6.89E-7	2.82E-6	1.82E-8	-8.18E-6	1.91E-5
NHWD	kg	1.56E-1	2.76E-2	3.46E-3	1.87E-1	1.67E-2	8.49E-2	6.68E-2	-1.99E-2	3.35E-1
RWD	kg	3.88E-5	3.05E-6	3.85E-6	4.58E-5	1.83E-6	6.63E-6	9.89E-8	-9.65E-6	4.47E-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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