

Environmental Profile

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

Ecochain v3.5.71



Product: 3037230 - OsmaD 250mm SQ Cover & Frame 10kN BK 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	4.91E+0	1.95E-1	4.87E-1	5.59E+0	6.10E-2	2.05E+0	2.00E-2	-2.68E+0	5.04E+0
GWP-f	kg CO2 eq	4.88E+0	1.95E-1	4.75E-1	5.55E+0	6.10E-2	2.05E+0	2.00E-2	-2.67E+0	5.02E+0
GWP-b	kg CO2 eq	2.96E-2	-3.92E-5	1.17E-2	4.13E-2	3.70E-5	-1.60E-3	2.48E-5	-1.73E-2	2.25E-2
GWP-luluc	kg CO2 eq	4.02E-3	1.27E-4	4.10E-4	4.56E-3	2.16E-5	7.36E-4	5.21E-7	-1.63E-3	3.69E-3
ODP	kg CFC11 eq	2.56E-6	3.98E-8	4.21E-8	2.65E-6	1.41E-8	2.01E-7	7.37E-10	-1.27E-6	1.59E-6
AP	mol H+ eq	2.29E-2	5.76E-3	2.58E-3	3.13E-2	3.47E-4	3.44E-3	1.79E-5	-9.61E-3	2.54E-2
EP-fw	kg P eq	2.16E-4	8.89E-7	6.62E-6	2.23E-4	5.02E-7	2.46E-5	2.35E-8	-9.25E-5	1.56E-4
EP-m	kg N eq	3.85E-3	1.43E-3	5.04E-4	5.78E-3	1.24E-4	8.38E-4	1.22E-5	-1.68E-3	5.08E-3
EP-T	mol N eq	4.20E-2	1.59E-2	5.50E-3	6.34E-2	1.37E-3	9.24E-3	7.14E-5	-1.79E-2	5.62E-2
POCP	kg NMVOC eq	1.48E-2	4.13E-3	2.40E-3	2.13E-2	3.92E-4	2.75E-3	2.46E-5	-6.21E-3	1.83E-2
ADP-mm	kg Sb eq	2.70E-3	1.85E-6	1.18E-5	2.71E-3	1.58E-6	1.34E-5	1.80E-8	-5.53E-5	2.67E-3
ADP-f	MJ	1.27E+2	2.55E+0	5.25E+0	1.34E+2	9.36E-1	9.30E+0	5.38E-2	-6.36E+1	8.10E+1
WDP	m3 depriv.	7.72E+0	4.26E-3	1.58E-1	7.88E+0	2.87E-3	3.73E-1	3.61E-4	-3.61E+0	4.65E+0
PM	disease inc.	1.64E-7	7.29E-9	1.77E-8	1.89E-7	5.51E-9	4.21E-8	3.70E-10	-6.07E-8	1.76E-7
IR	kBq U-235 eq	2.82E-1	1.10E-2	1.28E-2	3.06E-1	4.09E-3	3.26E-2	2.47E-4	-1.18E-1	2.25E-1
ETP-fw	CTUe	1.04E+2	1.70E+0	1.39E+1	1.20E+2	7.60E-1	7.25E+1	8.03E-1	-3.50E+1	1.59E+2
HTP-c	CTUh	3.62E-9	1.08E-10	5.44E-10	4.27E-9	2.71E-11	1.05E-9	1.49E-12	-1.33E-9	4.02E-9
HTP-nc	CTUh	1.15E-7	1.46E-9	2.90E-8	1.46E-7	9.06E-10	2.52E-8	1.56E-10	-4.59E-8	1.26E-7
SQP	Pt	1.70E+1	5.86E-1	1.81E+0	1.94E+1	8.01E-1	5.71E+0	1.37E-1	-6.54E+0	1.95E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.04E+0	1.97E-2	2.90E+1	3.51E+1	1.34E-2	6.76E-1	2.01E-3	-2.63E+0	3.32E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.04E+0	1.97E-2	2.90E+1	3.51E+1	1.34E-2	6.76E-1	2.01E-3	-2.63E+0	3.32E+1
PENRE	MJ	1.36E+2	2.71E+0	5.58E+0	1.44E+2	9.94E-1	9.89E+0	5.71E-2	-6.86E+1	8.62E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.36E+2	2.71E+0	5.58E+0	1.44E+2	9.94E-1	9.89E+0	5.71E-2	-6.86E+1	8.62E+1
PET	MJ	1.42E+2	2.73E+0	3.46E+1	1.79E+2	1.01E+0	1.06E+1	5.91E-2	-7.13E+1	1.19E+2
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	8.80E-2	1.53E-4	4.62E-3	9.28E-2	1.06E-4	1.05E-2	6.58E-5	-3.79E-2	6.56E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.05E-4	2.88E-6	4.62E-5	4.55E-4	2.39E-6	1.52E-5	6.55E-8	-5.38E-5	4.18E-4
NHWD	kg	4.71E-1	2.59E-2	9.49E-3	5.07E-1	5.80E-2	3.47E-1	2.38E-1	-1.93E-1	9.57E-1
RWD	kg	2.64E-4	1.77E-5	1.22E-5	2.93E-4	6.37E-6	3.48E-5	3.50E-7	-1.05E-4	2.30E-4
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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