

Environmental Profile

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

Ecochain v3.5.71



Product: 3037828 - OsmaD 250mm SI Chamber-600 BK 110 D/S
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	7.22E+0	1.49E-1	4.89E-1	7.85E+0	9.48E-2	2.76E+0	4.47E-2	-4.41E+0	6.34E+0
GWP-f	kg CO2 eq	7.19E+0	1.49E-1	4.73E-1	7.81E+0	9.48E-2	2.77E+0	4.48E-2	-4.40E+0	6.32E+0
GWP-b	kg CO2 eq	2.84E-2	9.05E-5	1.62E-2	4.47E-2	5.75E-5	-3.80E-3	3.90E-5	-1.58E-2	2.53E-2
GWP-luluc	kg CO2 eq	1.84E-3	5.29E-5	3.37E-4	2.23E-3	3.35E-5	5.32E-4	7.50E-7	-8.90E-4	1.91E-3
ODP	kg CFC11 eq	3.58E-7	3.44E-8	4.91E-8	4.41E-7	2.18E-8	6.92E-8	1.12E-9	-1.92E-7	3.41E-7
AP	mol H+ eq	2.64E-2	8.57E-4	2.40E-3	2.97E-2	5.40E-4	2.91E-3	2.67E-5	-1.24E-2	2.07E-2
EP-fw	kg P eq	1.04E-4	1.23E-6	6.35E-6	1.12E-4	7.80E-7	1.53E-5	3.46E-8	-5.05E-5	7.73E-5
EP-m	kg N eq	4.29E-3	3.06E-4	5.26E-4	5.12E-3	1.93E-4	8.45E-4	1.80E-5	-2.19E-3	3.98E-3
EP-T	mol N eq	4.80E-2	3.37E-3	5.61E-3	5.70E-2	2.13E-3	9.30E-3	1.08E-4	-2.43E-2	4.42E-2
POCP	kg NMVOC eq	2.24E-2	9.63E-4	2.68E-3	2.61E-2	6.08E-4	2.94E-3	4.07E-5	-1.12E-2	1.85E-2
ADP-mm	kg Sb eq	1.33E-4	3.86E-6	9.66E-6	1.46E-4	2.45E-6	1.15E-5	2.68E-8	-3.00E-5	1.30E-4
ADP-f	MJ	2.60E+2	2.29E+0	5.21E+0	2.68E+2	1.45E+0	9.23E+0	8.17E-2	-1.38E+2	1.40E+2
WDP	m3 depriv.	4.89E+0	7.03E-3	1.71E-1	5.07E+0	4.46E-3	1.81E-1	3.76E-4	-2.48E+0	2.78E+0
PM	disease inc.	2.63E-7	1.35E-8	1.59E-8	2.93E-7	8.55E-9	4.79E-8	5.62E-10	-1.03E-7	2.47E-7
IR	kBq U-235 eq	1.94E-1	1.00E-2	1.45E-2	2.18E-1	6.36E-3	2.78E-2	3.80E-4	-6.72E-2	1.86E-1
ETP-fw	CTUe	4.28E+1	1.86E+0	1.21E+1	5.67E+1	1.18E+0	1.05E+1	7.00E-2	-1.78E+1	5.07E+1
HTP-c	CTUh	1.57E-9	6.63E-11	4.76E-10	2.11E-9	4.20E-11	1.23E-9	1.97E-12	-7.56E-10	2.64E-9
HTP-nc	CTUh	4.52E-8	2.22E-9	3.33E-8	8.07E-8	1.41E-9	1.55E-8	4.43E-11	-2.16E-8	7.60E-8
SQP	Pt	1.01E+1	1.96E+0	1.63E+0	1.37E+1	1.24E+0	7.37E+0	2.10E-1	-3.85E+0	1.86E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.67E+0	3.29E-2	2.32E+1	2.69E+1	2.09E-2	4.55E-1	3.19E-3	-1.78E+0	2.56E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.67E+0	3.29E-2	2.32E+1	2.69E+1	2.09E-2	4.55E-1	3.19E-3	-1.78E+0	2.56E+1
PENRE	MJ	2.79E+2	2.43E+0	5.53E+0	2.87E+2	1.54E+0	9.84E+0	8.67E-2	-1.49E+2	1.49E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.79E+2	2.43E+0	5.53E+0	2.87E+2	1.54E+0	9.84E+0	8.67E-2	-1.49E+2	1.49E+2
PET	MJ	2.83E+2	2.47E+0	2.88E+1	3.14E+2	1.57E+0	1.03E+1	8.99E-2	-1.51E+2	1.75E+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	7.37E-2	2.59E-4	4.76E-3	7.87E-2	1.65E-4	5.36E-3	1.01E-4	-3.66E-2	4.77E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.19E-5	5.86E-6	6.25E-5	1.00E-4	3.72E-6	1.50E-5	9.82E-8	-3.29E-5	8.61E-5
NHWD	kg	2.54E-1	1.42E-1	1.25E-2	4.08E-1	9.02E-2	4.53E-1	3.60E-1	-1.10E-1	1.20E+0
RWD	kg	2.17E-4	1.56E-5	1.65E-5	2.49E-4	9.89E-6	3.52E-5	5.34E-7	-6.04E-5	2.35E-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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