

Environmental Profile

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

Ecochain v3.5.71



Product: 3036618 - OsmaD Sealed Hopper-Deep BN 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	1.92E+0	7.49E-2	2.12E-1	2.20E+0	2.32E-2	6.86E-1	7.41E-3	-1.01E+0	1.91E+0
GWP-f	kg CO2 eq	1.90E+0	7.48E-2	2.07E-1	2.18E+0	2.32E-2	6.86E-1	7.41E-3	-9.99E-1	1.90E+0
GWP-b	kg CO2 eq	1.51E-2	-1.53E-5	5.05E-3	2.01E-2	1.41E-5	-6.57E-4	9.26E-6	-6.43E-3	1.31E-2
GWP-luluc	kg CO2 eq	1.57E-3	4.90E-5	1.79E-4	1.80E-3	8.21E-6	2.84E-4	1.96E-7	-6.06E-4	1.49E-3
ODP	kg CFC11 eq	9.73E-7	1.53E-8	1.83E-8	1.01E-6	5.34E-9	7.76E-8	2.76E-10	-4.86E-7	6.04E-7
AP	mol H+ eq	9.07E-3	2.22E-3	1.13E-3	1.24E-2	1.32E-4	1.32E-3	6.72E-6	-3.75E-3	1.01E-2
EP-fw	kg P eq	8.55E-5	3.40E-7	2.89E-6	8.88E-5	1.91E-7	9.49E-6	8.82E-9	-3.64E-5	6.21E-5
EP-m	kg N eq	1.52E-3	5.50E-4	2.20E-4	2.29E-3	4.73E-5	3.19E-4	4.33E-6	-6.51E-4	2.01E-3
EP-T	mol N eq	1.67E-2	6.11E-3	2.40E-3	2.52E-2	5.21E-4	3.52E-3	2.68E-5	-6.94E-3	2.23E-2
POCP	kg NMVOC eq	5.70E-3	1.59E-3	1.04E-3	8.33E-3	1.49E-4	1.05E-3	9.22E-6	-2.48E-3	7.06E-3
ADP-mm	kg Sb eq	1.03E-3	7.07E-7	5.18E-6	1.04E-3	6.00E-7	5.19E-6	6.75E-9	-2.04E-5	1.03E-3
ADP-f	MJ	4.69E+1	9.77E-1	2.29E+0	5.02E+1	3.56E-1	3.58E+0	2.02E-2	-2.38E+1	3.04E+1
WDP	m3 depriv.	2.93E+0	1.63E-3	6.88E-2	3.00E+0	1.09E-3	1.43E-1	1.38E-4	-1.39E+0	1.75E+0
PM	disease inc.	6.63E-8	2.78E-9	7.72E-9	7.68E-8	2.09E-9	1.63E-8	1.39E-10	-2.45E-8	7.07E-8
IR	kBq U-235 eq	1.06E-1	4.20E-3	5.58E-3	1.16E-1	1.56E-3	1.26E-2	9.26E-5	-4.45E-2	8.53E-2
ETP-fw	CTUe	4.25E+1	6.50E-1	6.07E+0	4.92E+1	2.89E-1	2.78E+1	3.08E-1	-1.42E+1	6.34E+1
HTP-c	CTUh	3.19E-9	4.14E-11	2.38E-10	3.47E-9	1.03E-11	4.00E-10	5.59E-13	-5.13E-10	3.37E-9
HTP-nc	CTUh	4.88E-8	5.59E-10	1.26E-8	6.20E-8	3.45E-10	9.68E-9	5.94E-11	-1.29E-8	5.92E-8
SQP	Pt	6.68E+0	2.22E-1	7.91E-1	7.69E+0	3.04E-1	2.22E+0	5.15E-2	-2.52E+0	7.74E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.56E+0	7.53E-3	1.27E+1	1.53E+1	5.11E-3	2.61E-1	7.47E-4	-1.00E+0	1.46E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.56E+0	7.53E-3	1.27E+1	1.53E+1	5.11E-3	2.61E-1	7.47E-4	-1.00E+0	1.46E+1
PENRE	MJ	5.03E+1	1.04E+0	2.43E+0	5.38E+1	3.78E-1	3.81E+0	2.14E-2	-2.56E+1	3.24E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.03E+1	1.04E+0	2.43E+0	5.38E+1	3.78E-1	3.81E+0	2.14E-2	-2.56E+1	3.24E+1
PET	MJ	5.29E+1	1.05E+0	1.52E+1	6.91E+1	3.83E-1	4.07E+0	2.21E-2	-2.66E+1	4.69E+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	3.31E-2	5.85E-5	2.01E-3	3.51E-2	4.03E-5	3.95E-3	2.47E-5	-1.46E-2	2.46E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.60E-4	1.10E-6	2.00E-5	1.81E-4	9.10E-7	5.83E-6	2.46E-8	-2.26E-5	1.65E-4
NHWD	kg	3.05E-1	9.72E-3	4.11E-3	3.19E-1	2.21E-2	1.31E-1	8.92E-2	-7.63E-2	4.85E-1
RWD	kg	9.54E-5	6.78E-6	5.29E-6	1.07E-4	2.42E-6	1.34E-5	1.31E-7	-3.96E-5	8.39E-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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