

Environmental Profile

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

Ecochain v3.5.71



Product: 3032509 - OsmaDrain Junction 87.5° BN 110 SN8 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	1.74E+0	7.32E-2	1.60E-1	1.98E+0	2.21E-2	6.70E-1	7.21E-3	-9.69E-1	1.71E+0
GWP-f	kg CO2 eq	1.73E+0	7.32E-2	1.56E-1	1.96E+0	2.21E-2	6.70E-1	7.21E-3	-9.62E-1	1.70E+0
GWP-b	kg CO2 eq	1.01E-2	-8.86E-6	3.88E-3	1.40E-2	1.34E-5	-6.29E-4	8.76E-6	-6.36E-3	7.05E-3
GWP-luluc	kg CO2 eq	1.39E-3	4.57E-5	1.34E-4	1.57E-3	7.83E-6	2.59E-4	1.84E-7	-5.84E-4	1.26E-3
ODP	kg CFC11 eq	8.59E-7	1.51E-8	1.39E-8	8.88E-7	5.10E-9	6.93E-8	2.60E-10	-4.50E-7	5.12E-7
AP	mol H+ eq	8.05E-3	1.99E-3	8.48E-4	1.09E-2	1.26E-4	1.21E-3	6.33E-6	-3.51E-3	8.72E-3
EP-fw	kg P eq	7.52E-5	3.60E-7	2.18E-6	7.77E-5	1.82E-7	8.60E-6	8.31E-9	-3.32E-5	5.33E-5
EP-m	kg N eq	1.34E-3	4.98E-4	1.66E-4	2.01E-3	4.51E-5	2.96E-4	4.28E-6	-6.11E-4	1.74E-3
EP-T	mol N eq	1.47E-2	5.53E-3	1.81E-3	2.21E-2	4.97E-4	3.26E-3	2.53E-5	-6.50E-3	1.94E-2
POCP	kg NMVOC eq	5.26E-3	1.44E-3	7.91E-4	7.49E-3	1.42E-4	9.80E-4	8.74E-6	-2.29E-3	6.33E-3
ADP-mm	kg Sb eq	9.24E-4	8.14E-7	3.87E-6	9.29E-4	5.72E-7	4.76E-6	6.35E-9	-1.84E-5	9.16E-4
ADP-f	MJ	4.57E+1	9.73E-1	1.73E+0	4.84E+1	3.39E-1	3.32E+0	1.90E-2	-2.35E+1	2.85E+1
WDP	m3 depriv.	2.69E+0	1.78E-3	5.21E-2	2.74E+0	1.04E-3	1.29E-1	1.27E-4	-1.31E+0	1.56E+0
PM	disease inc.	5.62E-8	3.12E-9	5.80E-9	6.51E-8	2.00E-9	1.52E-8	1.31E-10	-2.24E-8	6.00E-8
IR	kBq U-235 eq	9.63E-2	4.19E-3	4.24E-3	1.05E-1	1.48E-3	1.16E-2	8.75E-5	-4.20E-2	7.59E-2
ETP-fw	CTUe	3.56E+1	6.64E-1	4.55E+0	4.08E+1	2.76E-1	2.45E+1	2.71E-1	-1.25E+1	5.34E+1
HTP-c	CTUh	1.25E-9	3.97E-11	1.78E-10	1.47E-9	9.81E-12	3.80E-10	5.23E-13	-4.78E-10	1.38E-9
HTP-nc	CTUh	3.96E-8	6.02E-10	9.57E-9	4.98E-8	3.29E-10	8.79E-9	5.29E-11	-1.65E-8	4.25E-8
SQP	Pt	5.87E+0	2.93E-1	5.94E-1	6.76E+0	2.90E-1	2.08E+0	4.86E-2	-2.33E+0	6.85E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.13E+0	8.26E-3	9.51E+0	1.16E+1	4.87E-3	2.37E-1	7.11E-4	-9.47E-1	1.09E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.13E+0	8.26E-3	9.51E+0	1.16E+1	4.87E-3	2.37E-1	7.11E-4	-9.47E-1	1.09E+1
PENRE	MJ	4.90E+1	1.03E+0	1.83E+0	5.18E+1	3.60E-1	3.54E+0	2.02E-2	-2.54E+1	3.04E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.90E+1	1.03E+0	1.83E+0	5.18E+1	3.60E-1	3.54E+0	2.02E-2	-2.54E+1	3.04E+1
PET	MJ	5.11E+1	1.04E+0	1.13E+1	6.35E+1	3.65E-1	3.77E+0	2.09E-2	-2.63E+1	4.13E+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	3.12E-2	6.43E-5	1.52E-3	3.28E-2	3.84E-5	3.55E-3	2.33E-5	-1.38E-2	2.27E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.39E-4	1.26E-6	1.53E-5	1.56E-4	8.68E-7	5.39E-6	2.32E-8	-1.88E-5	1.43E-4
NHWD	kg	1.62E-1	1.56E-2	3.15E-3	1.81E-1	2.10E-2	1.26E-1	8.41E-2	-6.93E-2	3.42E-1
RWD	kg	8.80E-5	6.73E-6	4.06E-6	9.88E-5	2.31E-6	1.25E-5	1.24E-7	-3.71E-5	7.65E-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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