

Environmental Profile

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

Ecochain v3.5.71



Product: 3035890 - OsmaDrain Socket Plug 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	3.42E-1	1.45E-2	2.37E-2	3.80E-1	4.51E-3	1.28E-1	1.41E-3	-1.91E-1	3.23E-1
GWP-f	kg CO2 eq	3.39E-1	1.45E-2	2.28E-2	3.76E-1	4.50E-3	1.28E-1	1.41E-3	-1.89E-1	3.21E-1
GWP-b	kg CO2 eq	2.79E-3	-3.03E-6	8.47E-4	3.63E-3	2.73E-6	-1.23E-4	1.76E-6	-1.31E-3	2.20E-3
GWP-luluc	kg CO2 eq	2.83E-4	9.52E-6	1.54E-5	3.08E-4	1.59E-6	5.53E-5	3.76E-8	-1.22E-4	2.43E-4
ODP	kg CFC11 eq	1.85E-7	2.96E-9	2.47E-9	1.91E-7	1.04E-9	1.51E-8	5.29E-11	-9.48E-8	1.12E-7
AP	mol H+ eq	1.58E-3	4.32E-4	1.14E-4	2.12E-3	2.56E-5	2.55E-4	1.29E-6	-7.13E-4	1.69E-3
EP-fw	kg P eq	1.54E-5	6.56E-8	3.04E-7	1.58E-5	3.70E-8	1.84E-6	1.69E-9	-6.94E-6	1.07E-5
EP-m	kg N eq	2.66E-4	1.07E-4	2.58E-5	3.99E-4	9.17E-6	6.16E-5	7.87E-7	-1.23E-4	3.47E-4
EP-T	mol N eq	2.91E-3	1.19E-3	2.73E-4	4.37E-3	1.01E-4	6.79E-4	5.13E-6	-1.31E-3	3.84E-3
POCP	kg NMVOC eq	9.88E-4	3.09E-4	1.34E-4	1.43E-3	2.89E-5	2.03E-4	1.76E-6	-4.56E-4	1.21E-3
ADP-mm	kg Sb eq	2.02E-4	1.35E-7	4.39E-7	2.02E-4	1.16E-7	1.01E-6	1.29E-9	-3.85E-6	1.99E-4
ADP-f	MJ	8.64E+0	1.89E-1	2.52E-1	9.08E+0	6.91E-2	6.97E-1	3.86E-3	-4.59E+0	5.26E+0
WDP	m3 depriv.	5.65E-1	3.13E-4	8.45E-3	5.74E-1	2.12E-4	2.78E-2	2.72E-5	-2.71E-1	3.30E-1
PM	disease inc.	1.03E-8	5.35E-10	7.48E-10	1.16E-8	4.06E-10	3.15E-9	2.66E-11	-4.51E-9	1.06E-8
IR	kBq U-235 eq	1.86E-2	8.14E-4	7.23E-4	2.01E-2	3.02E-4	2.45E-3	1.77E-5	-8.76E-3	1.41E-2
ETP-fw	CTUe	7.36E+0	1.26E-1	5.63E-1	8.05E+0	5.61E-2	5.41E+0	5.99E-2	-2.61E+0	1.10E+1
HTP-c	CTUh	2.63E-10	8.03E-12	2.21E-11	2.93E-10	2.00E-12	7.89E-11	1.07E-13	-9.95E-11	2.75E-10
HTP-nc	CTUh	8.42E-9	1.08E-10	1.67E-9	1.02E-8	6.69E-11	1.88E-9	1.15E-11	-3.44E-9	8.71E-9
SQP	Pt	1.12E+0	4.21E-2	7.64E-2	1.24E+0	5.91E-2	4.29E-1	9.87E-3	-4.84E-1	1.25E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.25E-1	1.45E-3	1.05E+0	1.47E+0	9.91E-4	5.07E-2	1.42E-4	-1.97E-1	1.33E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.25E-1	1.45E-3	1.05E+0	1.47E+0	9.91E-4	5.07E-2	1.42E-4	-1.97E-1	1.33E+0
PENRE	MJ	9.27E+0	2.01E-1	2.67E-1	9.74E+0	7.34E-2	7.41E-1	4.10E-3	-4.95E+0	5.61E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.27E+0	2.01E-1	2.67E-1	9.74E+0	7.34E-2	7.41E-1	4.10E-3	-4.95E+0	5.61E+0
PET	MJ	9.69E+0	2.02E-1	1.31E+0	1.12E+1	7.43E-2	7.92E-1	4.24E-3	-5.14E+0	6.94E+0
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	6.23E-3	1.13E-5	2.32E-4	6.48E-3	7.82E-6	7.58E-4	4.72E-6	-2.83E-3	4.41E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.11E-5	2.11E-7	3.24E-6	3.45E-5	1.77E-7	1.12E-6	4.72E-9	-3.82E-6	3.20E-5
NHWD	kg	3.33E-2	1.81E-3	6.45E-4	3.57E-2	4.28E-3	2.55E-2	1.71E-2	-1.45E-2	6.82E-2
RWD	kg	1.61E-5	1.31E-6	8.58E-7	1.83E-5	4.70E-7	2.61E-6	2.51E-8	-7.72E-6	1.37E-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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