

Environmental Profile

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

Ecochain v3.5.71



Product: 3036402 - OsmaDrain Coupler BN 160 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	8.42E-1	3.64E-2	4.16E-2	9.20E-1	1.13E-2	3.06E-1	3.53E-3	-4.70E-1	7.71E-1
GWP-f	kg CO2 eq	8.34E-1	3.64E-2	4.01E-2	9.11E-1	1.13E-2	3.06E-1	3.53E-3	-4.67E-1	7.65E-1
GWP-b	kg CO2 eq	7.43E-3	-7.79E-6	1.49E-3	8.91E-3	6.84E-6	-3.08E-4	4.44E-6	-3.30E-3	5.31E-3
GWP-luluc	kg CO2 eq	6.98E-4	2.39E-5	2.70E-5	7.48E-4	3.99E-6	1.39E-4	9.42E-8	-3.06E-4	5.85E-4
ODP	kg CFC11 eq	4.66E-7	7.40E-9	4.33E-9	4.78E-7	2.60E-9	3.80E-8	1.33E-10	-2.38E-7	2.81E-7
AP	mol H+ eq	3.88E-3	1.09E-3	2.00E-4	5.16E-3	6.42E-5	6.38E-4	3.23E-6	-1.79E-3	4.08E-3
EP-fw	kg P eq	3.82E-5	1.64E-7	5.33E-7	3.89E-5	9.27E-8	4.64E-6	4.24E-9	-1.74E-5	2.62E-5
EP-m	kg N eq	6.53E-4	2.69E-4	4.52E-5	9.68E-4	2.30E-5	1.54E-4	1.98E-6	-3.08E-4	8.38E-4
EP-T	mol N eq	7.10E-3	3.00E-3	4.79E-4	1.06E-2	2.53E-4	1.69E-3	1.29E-5	-3.27E-3	9.26E-3
POCP	kg NMVOC eq	2.41E-3	7.78E-4	2.34E-4	3.42E-3	7.23E-5	5.07E-4	4.42E-6	-1.14E-3	2.87E-3
ADP-mm	kg Sb eq	5.03E-4	3.36E-7	7.70E-7	5.04E-4	2.91E-7	2.52E-6	3.24E-9	-9.67E-6	4.97E-4
ADP-f	MJ	2.13E+1	4.74E-1	4.42E-1	2.22E+1	1.73E-1	1.75E+0	9.69E-3	-1.14E+1	1.27E+1
WDP	m3 depriv.	1.41E+0	7.79E-4	1.48E-2	1.43E+0	5.31E-4	6.98E-2	6.71E-5	-6.82E-1	8.14E-1
PM	disease inc.	2.50E-8	1.33E-9	1.31E-9	2.77E-8	1.02E-9	7.88E-9	6.66E-11	-1.13E-8	2.53E-8
IR	kBq U-235 eq	4.63E-2	2.04E-3	1.27E-3	4.96E-2	7.56E-4	6.13E-3	4.44E-5	-2.20E-2	3.46E-2
ETP-fw	CTUe	1.82E+1	3.14E-1	9.88E-1	1.95E+1	1.40E-1	1.36E+1	1.51E-1	-6.56E+0	2.69E+1
HTP-c	CTUh	6.51E-10	2.02E-11	3.88E-11	7.10E-10	5.00E-12	1.95E-10	2.69E-13	-2.50E-10	6.61E-10
HTP-nc	CTUh	2.10E-8	2.68E-10	2.93E-9	2.42E-8	1.67E-10	4.71E-9	2.90E-11	-8.65E-9	2.04E-8
SQP	Pt	2.70E+0	1.03E-1	1.34E-1	2.94E+0	1.48E-1	1.07E+0	2.47E-2	-1.21E+0	2.97E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.05E+0	3.61E-3	1.84E+0	2.89E+0	2.48E-3	1.27E-1	3.57E-4	-4.95E-1	2.53E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.05E+0	3.61E-3	1.84E+0	2.89E+0	2.48E-3	1.27E-1	3.57E-4	-4.95E-1	2.53E+0
PENRE	MJ	2.28E+1	5.03E-1	4.69E-1	2.38E+1	1.84E-1	1.86E+0	1.03E-2	-1.23E+1	1.36E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.28E+1	5.03E-1	4.69E-1	2.38E+1	1.84E-1	1.86E+0	1.03E-2	-1.23E+1	1.36E+1
PET	MJ	2.39E+1	5.07E-1	2.31E+0	2.67E+1	1.86E-1	1.99E+0	1.06E-2	-1.28E+1	1.61E+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	1.54E-2	2.80E-5	4.08E-4	1.58E-2	1.96E-5	1.91E-3	1.18E-5	-7.11E-3	1.06E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.76E-5	5.22E-7	5.68E-6	8.38E-5	4.42E-7	2.81E-6	1.18E-8	-9.43E-6	7.77E-5
NHWD	kg	8.11E-2	4.34E-3	1.13E-3	8.65E-2	1.07E-2	6.31E-2	4.28E-2	-3.63E-2	1.67E-1
RWD	kg	4.02E-5	3.29E-6	1.51E-6	4.50E-5	1.18E-6	6.53E-6	6.30E-8	-1.94E-5	3.34E-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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