

Environmental Profile

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

Ecochain v3.5.71



Product: 3032519 - OsmaDrain Cover/Frame Spare-4D900 BN
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

This document and supporting material contain confidential and proprietary business information of Wavin - UK - Chippenham - Verified. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - UK - Chippenham - Verified.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.26E+0	4.77E-2	1.31E-1	1.44E+0	1.69E-2	4.65E-1	5.89E-3	-7.21E-1	1.21E+0
GWP-f	kg CO2 eq	1.25E+0	4.77E-2	1.28E-1	1.43E+0	1.68E-2	4.65E-1	5.89E-3	-7.17E-1	1.20E+0
GWP-b	kg CO2 eq	9.75E-3	-5.29E-6	3.09E-3	1.28E-2	1.02E-5	-5.11E-4	6.70E-6	-4.41E-3	7.93E-3
GWP-luluc	kg CO2 eq	8.63E-4	2.96E-5	1.11E-4	1.00E-3	5.96E-6	1.81E-4	1.38E-7	-3.85E-4	8.06E-4
ODP	kg CFC11 eq	5.52E-7	9.86E-9	1.12E-8	5.73E-7	3.88E-9	4.64E-8	1.98E-10	-2.78E-7	3.45E-7
AP	mol H+ eq	5.50E-3	1.28E-3	6.98E-4	7.48E-3	9.60E-5	8.52E-4	4.80E-6	-2.56E-3	5.88E-3
EP-fw	kg P eq	4.76E-5	2.37E-7	1.79E-6	4.96E-5	1.39E-7	5.95E-6	6.27E-9	-2.19E-5	3.37E-5
EP-m	kg N eq	9.21E-4	3.21E-4	1.36E-4	1.38E-3	3.43E-5	2.11E-4	2.99E-6	-4.43E-4	1.18E-3
EP-T	mol N eq	1.01E-2	3.57E-3	1.48E-3	1.51E-2	3.78E-4	2.33E-3	1.92E-5	-4.75E-3	1.31E-2
POCP	kg NMVOC eq	3.67E-3	9.30E-4	6.42E-4	5.24E-3	1.08E-4	7.04E-4	6.75E-6	-1.76E-3	4.30E-3
ADP-mm	kg Sb eq	5.57E-4	5.40E-7	3.21E-6	5.61E-4	4.36E-7	3.37E-6	4.82E-9	-1.23E-5	5.53E-4
ADP-f	MJ	3.54E+1	6.35E-1	1.42E+0	3.75E+1	2.59E-1	2.38E+0	1.45E-2	-1.88E+1	2.13E+1
WDP	m3 depriv.	1.81E+0	1.18E-3	4.24E-2	1.85E+0	7.94E-4	8.75E-2	9.09E-5	-8.79E-1	1.06E+0
PM	disease inc.	4.01E-8	2.06E-9	4.79E-9	4.70E-8	1.52E-9	1.10E-8	9.96E-11	-1.72E-8	4.24E-8
IR	kBq U-235 eq	6.16E-2	2.74E-3	3.44E-3	6.78E-2	1.13E-3	8.19E-3	6.66E-5	-2.78E-2	4.94E-2
ETP-fw	CTUe	2.23E+1	4.35E-1	3.76E+0	2.65E+1	2.10E-1	1.60E+1	1.76E-1	-8.21E+0	3.47E+1
HTP-c	CTUh	8.01E-10	2.58E-11	1.48E-10	9.74E-10	7.47E-12	2.74E-10	3.89E-13	-3.16E-10	9.40E-10
HTP-nc	CTUh	2.56E-8	3.97E-10	7.76E-9	3.38E-8	2.50E-10	6.04E-9	3.51E-11	-1.08E-8	2.93E-8
SQP	Pt	3.52E+0	1.97E-1	4.90E-1	4.21E+0	2.21E-1	1.54E+0	3.71E-2	-1.54E+0	4.46E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.34E+0	5.45E-3	7.91E+0	9.26E+0	3.71E-3	1.65E-1	5.41E-4	-6.37E-1	8.79E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.34E+0	5.45E-3	7.91E+0	9.26E+0	3.71E-3	1.65E-1	5.41E-4	-6.37E-1	8.79E+0
PENRE	MJ	3.80E+1	6.74E-1	1.50E+0	4.02E+1	2.75E-1	2.54E+0	1.54E-2	-2.02E+1	2.27E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.80E+1	6.74E-1	1.50E+0	4.02E+1	2.75E-1	2.54E+0	1.54E-2	-2.02E+1	2.27E+1
PET	MJ	3.93E+1	6.80E-1	9.41E+0	4.94E+1	2.78E-1	2.70E+0	1.59E-2	-2.09E+1	3.15E+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	2.04E-2	4.25E-5	1.24E-3	2.17E-2	2.93E-5	2.41E-3	1.78E-5	-9.62E-3	1.45E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.74E-5	8.34E-7	1.22E-5	1.00E-4	6.61E-7	3.85E-6	1.76E-8	-1.21E-5	9.29E-5
NHWD	kg	1.03E-1	1.07E-2	2.52E-3	1.16E-1	1.60E-2	9.11E-2	6.41E-2	-4.59E-2	2.41E-1
RWD	kg	5.63E-5	4.39E-6	3.24E-6	6.40E-5	1.76E-6	8.94E-6	9.43E-8	-2.45E-5	5.02E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777