

Environmental Profile

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

Ecochain v3.5.71



Product: 3035360 - OsmaD Spare Grating for Hoppers BK
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	1.12E-1	2.24E-3	1.20E-2	1.26E-1	1.48E-3	4.30E-2	6.95E-4	-6.88E-2	1.03E-1
GWP-f	kg CO2 eq	1.12E-1	2.24E-3	1.17E-2	1.26E-1	1.47E-3	4.31E-2	6.95E-4	-6.85E-2	1.02E-1
GWP-b	kg CO2 eq	4.70E-4	1.36E-6	2.73E-4	7.45E-4	8.95E-7	-5.91E-5	6.06E-7	-2.40E-4	4.48E-4
GWP-luluc	kg CO2 eq	2.73E-5	7.94E-7	1.03E-5	3.84E-5	5.22E-7	8.28E-6	1.16E-8	-1.32E-5	3.40E-5
ODP	kg CFC11 eq	5.16E-9	5.17E-10	1.01E-9	6.69E-9	3.40E-10	1.08E-9	1.74E-11	-2.55E-9	5.58E-9
AP	mol H+ eq	4.06E-4	1.28E-5	6.41E-5	4.83E-4	8.40E-6	4.52E-5	4.15E-7	-1.92E-4	3.45E-4
EP-fw	kg P eq	1.55E-6	1.85E-8	1.64E-7	1.74E-6	1.21E-8	2.39E-7	5.37E-10	-7.53E-7	1.23E-6
EP-m	kg N eq	6.62E-5	4.57E-6	1.23E-5	8.31E-5	3.00E-6	1.32E-5	2.72E-7	-3.40E-5	6.56E-5
EP-T	mol N eq	7.41E-4	5.04E-5	1.35E-4	9.26E-4	3.31E-5	1.45E-4	1.69E-6	-3.76E-4	7.30E-4
POCP	kg NMVOC eq	3.44E-4	1.44E-5	5.81E-5	4.16E-4	9.46E-6	4.58E-5	6.33E-7	-1.74E-4	2.99E-4
ADP-mm	kg Sb eq	1.27E-6	5.80E-8	2.98E-7	1.62E-6	3.81E-8	1.79E-7	4.17E-10	-4.53E-7	1.39E-6
ADP-f	MJ	4.05E+0	3.44E-2	1.30E-1	4.21E+0	2.26E-2	1.44E-1	1.27E-3	-2.16E+0	2.22E+0
WDP	m3 depriv.	7.51E-2	1.06E-4	3.86E-3	7.91E-2	6.94E-5	2.82E-3	5.82E-6	-3.74E-2	4.46E-2
PM	disease inc.	4.05E-9	2.02E-10	4.41E-10	4.69E-9	1.33E-10	7.45E-10	8.74E-12	-1.61E-9	3.97E-9
IR	kBq U-235 eq	2.83E-3	1.50E-4	3.11E-4	3.29E-3	9.89E-5	4.33E-4	5.90E-6	-1.00E-3	2.82E-3
ETP-fw	CTUe	6.38E-1	2.80E-2	3.47E-1	1.01E+0	1.84E-2	1.62E-1	1.06E-3	-2.67E-1	9.28E-1
HTP-c	CTUh	2.39E-11	9.95E-13	1.36E-11	3.85E-11	6.54E-13	1.92E-11	3.06E-14	-1.14E-11	4.70E-11
HTP-nc	CTUh	6.90E-10	3.33E-11	7.01E-10	1.42E-9	2.19E-11	2.41E-10	6.82E-13	-3.23E-10	1.36E-9
SQP	Pt	1.48E-1	2.95E-2	4.51E-2	2.23E-1	1.94E-2	1.15E-1	3.26E-3	-5.79E-2	3.02E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.47E-2	4.94E-4	7.34E-1	7.89E-1	3.25E-4	7.08E-3	4.95E-5	-2.68E-2	7.70E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.47E-2	4.94E-4	7.34E-1	7.89E-1	3.25E-4	7.08E-3	4.95E-5	-2.68E-2	7.70E-1
PENRE	MJ	4.34E+0	3.65E-2	1.37E-1	4.52E+0	2.40E-2	1.53E-1	1.35E-3	-2.33E+0	2.37E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.34E+0	3.65E-2	1.37E-1	4.52E+0	2.40E-2	1.53E-1	1.35E-3	-2.33E+0	2.37E+0
PET	MJ	4.40E+0	3.70E-2	8.71E-1	5.31E+0	2.43E-2	1.60E-1	1.40E-3	-2.36E+0	3.14E+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	1.12E-3	3.90E-6	1.13E-4	1.24E-3	2.56E-6	8.29E-5	1.57E-6	-5.59E-4	7.63E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.74E-7	8.80E-8	1.09E-6	1.65E-6	5.79E-8	2.33E-7	1.53E-9	-5.01E-7	1.44E-6
NHWD	kg	3.90E-3	2.13E-3	2.24E-4	6.26E-3	1.40E-3	7.05E-3	5.61E-3	-1.66E-3	1.87E-2
RWD	kg	3.15E-6	2.34E-7	2.88E-7	3.67E-6	1.54E-7	5.48E-7	8.31E-9	-9.02E-7	3.48E-6
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