

Environmental Profile

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

Ecochain v3.5.71



Product: 3036249 - OsmaD Gully Grating Spare-4D900 BK PP
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	3.00E-1	6.01E-3	2.24E-2	3.28E-1	3.95E-3	1.15E-1	1.86E-3	-1.84E-1	2.65E-1
GWP-f	kg CO2 eq	2.98E-1	6.00E-3	2.16E-2	3.26E-1	3.95E-3	1.15E-1	1.86E-3	-1.83E-1	2.63E-1
GWP-b	kg CO2 eq	1.28E-3	3.64E-6	8.01E-4	2.09E-3	2.40E-6	-1.58E-4	1.62E-6	-6.41E-4	1.29E-3
GWP-luluc	kg CO2 eq	7.26E-5	2.12E-6	1.45E-5	8.93E-5	1.40E-6	2.22E-5	3.12E-8	-3.54E-5	7.75E-5
ODP	kg CFC11 eq	1.38E-8	1.38E-9	2.34E-9	1.75E-8	9.10E-10	2.88E-9	4.67E-11	-6.78E-9	1.46E-8
AP	mol H+ eq	1.09E-3	3.42E-5	1.08E-4	1.23E-3	2.25E-5	1.21E-4	1.11E-6	-5.15E-4	8.57E-4
EP-fw	kg P eq	4.14E-6	4.94E-8	2.87E-7	4.47E-6	3.25E-8	6.39E-7	1.44E-9	-2.02E-6	3.13E-6
EP-m	kg N eq	1.77E-4	1.22E-5	2.44E-5	2.13E-4	8.05E-6	3.52E-5	7.28E-7	-9.09E-5	1.66E-4
EP-T	mol N eq	1.98E-3	1.35E-4	2.58E-4	2.37E-3	8.87E-5	3.87E-4	4.52E-6	-1.01E-3	1.85E-3
POCP	kg NMVOC eq	9.18E-4	3.85E-5	1.26E-4	1.08E-3	2.54E-5	1.23E-4	1.70E-6	-4.65E-4	7.68E-4
ADP-mm	kg Sb eq	3.43E-6	1.55E-7	4.15E-7	4.00E-6	1.02E-7	4.80E-7	1.12E-9	-1.21E-6	3.37E-6
ADP-f	MJ	1.08E+1	9.21E-2	2.38E-1	1.12E+1	6.06E-2	3.85E-1	3.40E-3	-5.78E+0	5.83E+0
WDP	m3 depriv.	2.01E-1	2.83E-4	7.99E-3	2.09E-1	1.86E-4	7.55E-3	1.56E-5	-1.00E-1	1.17E-1
PM	disease inc.	1.08E-8	5.42E-10	7.08E-10	1.21E-8	3.56E-10	2.00E-9	2.34E-11	-4.30E-9	1.01E-8
IR	kBq U-235 eq	7.55E-3	4.03E-4	6.84E-4	8.64E-3	2.65E-4	1.16E-3	1.58E-5	-2.68E-3	7.39E-3
ETP-fw	CTUe	1.70E+0	7.48E-2	5.33E-1	2.31E+0	4.92E-2	4.34E-1	2.85E-3	-7.13E-1	2.08E+0
HTP-c	CTUh	6.39E-11	2.66E-12	2.09E-11	8.75E-11	1.75E-12	5.14E-11	8.20E-14	-3.05E-11	1.10E-10
HTP-nc	CTUh	1.84E-9	8.92E-11	1.58E-9	3.51E-9	5.87E-11	6.44E-10	1.83E-12	-8.64E-10	3.35E-9
SQP	Pt	3.96E-1	7.88E-2	7.23E-2	5.47E-1	5.19E-2	3.07E-1	8.74E-3	-1.55E-1	7.60E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.46E-1	1.32E-3	9.91E-1	1.14E+0	8.70E-4	1.90E-2	1.33E-4	-7.17E-2	1.09E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.46E-1	1.32E-3	9.91E-1	1.14E+0	8.70E-4	1.90E-2	1.33E-4	-7.17E-2	1.09E+0
PENRE	MJ	1.16E+1	9.78E-2	2.53E-1	1.20E+1	6.43E-2	4.10E-1	3.61E-3	-6.23E+0	6.21E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.16E+1	9.78E-2	2.53E-1	1.20E+1	6.43E-2	4.10E-1	3.61E-3	-6.23E+0	6.21E+0
PET	MJ	1.18E+1	9.91E-2	1.24E+0	1.31E+1	6.52E-2	4.29E-1	3.74E-3	-6.30E+0	7.30E+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	2.98E-3	1.04E-5	2.20E-4	3.21E-3	6.86E-6	2.22E-4	4.20E-6	-1.50E-3	1.95E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.27E-6	2.36E-7	3.06E-6	4.57E-6	1.55E-7	6.24E-7	4.09E-9	-1.33E-6	4.02E-6
NHWD	kg	1.05E-2	5.71E-3	6.10E-4	1.68E-2	3.76E-3	1.88E-2	1.50E-2	-4.45E-3	5.00E-2
RWD	kg	8.41E-6	6.27E-7	8.12E-7	9.85E-6	4.12E-7	1.47E-6	2.22E-8	-2.41E-6	9.34E-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



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