Environmental Profile

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

Ecochain v4.3.1

Product:	3060809 - Gravity infiltrationpipe kit 110/1x15m
Unit:	1 piece
Manufacturer:	Wavin - SE - Eskilstuna - Verified

LCA standard:	EN15804+A2 (2019)
Standard database:	Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified:	Yes

An Orbia business.

Issue date:	29-11-2024
End of validity:	29-11-2029
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 - SE - Eskilstuna - 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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
C4 Disposal

Benefits and loads beyond the system boundaries

D Reuse- Recovery- Recycling- potential

Environmental impacts and parameters

GWP-total = EF Climate change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF Climate change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF 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]; **EET** = Exported energy thermic [MJ]; **EEE** = Exported energy electric [MJ]; **BIO-C-Product** = Biogenic C content, product [kg C]; **BIO-C-Packaging** = Biogenic C content, packaging [kg C]

Statement of Confidentiality

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.311E+1	2.251E+0	9.658E-1	3.633E+1	3.794E-1	1.288E+1	2.018E-1	-1.924E+1	3.055E+1
GWP-f	kg CO2 eq	3.311E+1	2.249E+0	7.976E-1	3.616E+1	3.791E-1	1.278E+1	2.018E-1	-1.920E+1	3.032E+1
GWP-b	kg CO2 eq	-1.859E-2	6.717E-4	7.548E-2	5.756E-2	1.453E-4	9.179E-2	1.253E-5	-3.255E-2	1.170E-1
GWP-luluc	kg CO2 eq	1.863E-2	1.253E-3	9.272E-2	1.126E-1	1.342E-4	2.241E-3	3.035E-6	-7.063E-3	1.079E-1
ODP	kg CFC11 eq	1.816E-6	4.700E-7	9.033E-8	2.377E-6	8.737E-8	3.252E-7	4.449E-9	-1.300E-6	1.494E-6
AP	mol H+ eq	1.300E-1	4.836E-2	6.755E-3	1.852E-1	2.160E-3	1.219E-2	1.064E-4	-5.666E-2	1.429E-1
EP-fw	kg P eq	7.350E-4	1.478E-5	1.472E-5	7.645E-4	3.120E-6	6.581E-5	1.391E-7	-3.804E-4	4.531E-4
EP-m	kg N eq	2.244E-2	1.245E-2	2.002E-3	3.689E-2	7.727E-4	3.503E-3	7.397E-5	-1.028E-2	3.096E-2
EP-T	mol N eq	2.536E-1	1.383E-1	2.197E-2	4.138E-1	8.516E-3	3.856E-2	4.313E-4	-1.135E-1	3.479E-1
POCP	kg NMVOC eq	1.113E-1	3.638E-2	6.101E-3	1.537E-1	2.434E-3	1.211E-2	1.675E-4	-6.174E-2	1.067E-1
ADP-mm	kg Sb eq	1.678E-3	3.335E-5	2.400E-5	1.735E-3	9.808E-6	4.795E-5	1.071E-7	-1.342E-4	1.659E-3
ADP-f	MJ	1.060E+3	3.089E+1	7.924E+0	1.098E+3	5.820E+0	3.790E+1	3.250E-1	-5.684E+2	5.741E+2
WDP	m3 depriv.	2.555E+1	7.474E-2	5.106E+0	3.073E+1	1.786E-2	8.055E-1	1.654E-3	-1.601E+1	1.555E+1
PM	disease inc.	1.110E-6	1.240E-7	1.140E-7	1.348E-6	3.422E-8	1.950E-7	2.233E-9	-4.124E-7	1.167E-6
IR	kBq U-235 eq	9.173E-1	1.311E-1	2.356E-2	1.072E+0	2.544E-2	1.157E-1	1.511E-3	-5.385E-1	6.762E-1
ETP-fw	CTUe	2.950E+2	2.336E+1	2.209E+1	3.404E+2	4.726E+0	6.264E+1	5.120E-1	-1.002E+2	3.081E+2
HTP-c	CTUh	1.234E-8	1.154E-9	8.726E-10	1.437E-8	1.682E-10	5.099E-9	8.039E-12	-3.925E-9	1.572E-8
HTP-nc	CTUh	2.773E-7	2.234E-8	2.379E-8	3.234E-7	5.634E-9	6.781E-8	2.197E-10	-9.044E-8	3.066E-7
SQP	Pt	8.577E+1	1.443E+1	1.042E+0	1.012E+2	4.979E+0	2.977E+1	8.333E-1	-3.161E+1	1.052E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.849E+1	2.890E-1	4.998E+1	7.875E+1	8.349E-2	1.937E+0	1.274E-2	-1.350E+1	6.729E+1
PERM	MJ	1.057E-1	0	0	1.057E-1	0	0	0	0	1.057E-1
PERT	MJ	2.859E+1	2.890E-1	4.998E+1	7.886E+1	8.349E-2	1.937E+0	1.274E-2	-1.350E+1	6.739E+1
PENRE	MJ	1.135E+3	3.279E+1	8.416E+0	1.176E+3	6.179E+0	4.037E+1	3.448E-1	-6.125E+2	6.105E+2
PENRM	MJ	1.716E+0	0	0	1.716E+0	0	0	0	0	1.716E+0
PENRT	MJ	1.137E+3	3.279E+1	8.416E+0	1.178E+3	6.179E+0	4.037E+1	3.448E-1	-6.125E+2	6.122E+2
PET	MJ	1.165E+3	3.308E+1	5.839E+1	1.257E+3	6.262E+0	4.231E+1	3.575E-1	-6.260E+2	6.796E+2
SM	kg	9.303E-1	0	0	9.303E-1	0	0	0	0	9.303E-1
RSF	MJ	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0
FW	m3	4.282E-1	2.584E-3	1.213E-1	5.521E-1	6.586E-4	2.414E-2	4.009E-4	-2.249E-1	3.524E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.813E-4	5.090E-5	1.207E-5	4.443E-4	1.488E-5	6.224E-5	3.916E-7	-1.834E-4	3.384E-4
NHWD	kg	1.778E+0	9.274E-1	3.698E-2	2.742E+0	3.607E-1	1.840E+0	1.431E+0	-5.928E-1	5.780E+0
RWD	kg	8.406E-4	2.094E-4	3.353E-5	1.084E-3	3.958E-5	1.446E-4	2.123E-6	-4.644E-4	8.054E-4
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
EET	MJ	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0	0	0	0
Others	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
BIO-C-Product	kg C	0	0	0	0	0	0	0	0	0
BIO-C-Packaging	kg C	2.398E-2	0	0	2.398E-2	0	0	0	0	2.398E-2

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