

Environmental Profile

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

Ecochain v3.5.64



Product: 3062856 - Gravity Infiltration Pipe BL 110 L=5
Unit: 1 piece
Manufacturer: Wavin - SE - Eskilstuna

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 20-06-2022
End of validity: 20-06-2027
Verifier: Harry van Ewijk - 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 (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 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]; **EE** = Exported energy [MJ]; **EET** = Exported energy thermic [MJ]; **EEE** = Exported energy electric [MJ]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	6.04E+0	4.67E-1	1.95E-1	6.70E+0	7.25E-2	2.66E+0	4.00E-2	-3.85E+0	5.63E+0
GWP-f	kg CO2 eq	6.02E+0	4.67E-1	1.41E-1	6.63E+0	7.24E-2	2.67E+0	4.00E-2	-3.83E+0	5.57E+0
GWP-b	kg CO2 eq	2.02E-2	-2.96E-5	3.71E-2	5.72E-2	4.40E-5	-2.93E-3	3.00E-5	-1.35E-2	4.09E-2
GWP-luluc	kg CO2 eq	2.15E-3	2.75E-4	1.64E-2	1.88E-2	2.56E-5	4.10E-4	5.87E-7	-8.12E-4	1.84E-2
ODP	kg CFC11 eq	1.69E-7	9.66E-8	1.60E-8	2.81E-7	1.67E-8	5.41E-8	8.57E-10	-1.93E-7	1.60E-7
AP	mol H+ eq	2.26E-2	1.13E-2	1.19E-3	3.50E-2	4.12E-4	2.29E-3	2.05E-5	-1.03E-2	2.75E-2
EP-fw	kg P eq	1.14E-4	2.79E-6	2.60E-6	1.19E-4	5.96E-7	1.19E-5	2.69E-8	-4.63E-5	8.55E-5
EP-m	kg N eq	3.85E-3	2.86E-3	3.54E-4	7.07E-3	1.48E-4	6.73E-4	1.44E-5	-1.90E-3	6.00E-3
EP-T	mol N eq	4.36E-2	3.18E-2	3.89E-3	7.93E-2	1.63E-3	7.41E-3	8.31E-5	-2.11E-2	6.73E-2
POCP	kg NMVOC eq	2.04E-2	8.32E-3	1.08E-3	2.98E-2	4.65E-4	2.33E-3	3.25E-5	-9.83E-3	2.28E-2
ADP-mm	kg Sb eq	8.41E-5	6.09E-6	4.25E-6	9.44E-5	1.87E-6	8.96E-6	2.07E-8	-2.35E-5	8.18E-5
ADP-f	MJ	2.04E+2	6.30E+0	1.40E+0	2.12E+2	1.11E+0	7.15E+0	6.26E-2	-1.12E+2	1.08E+2
WDP	m3 depriv.	4.73E+0	1.39E-2	9.03E-1	5.65E+0	3.41E-3	1.40E-1	3.27E-4	-2.13E+0	3.67E+0
PM	disease inc.	1.90E-7	2.30E-8	2.02E-8	2.33E-7	6.54E-9	3.74E-8	4.30E-10	-8.14E-8	1.96E-7
IR	kBq U-235 eq	1.47E-1	2.68E-2	4.17E-3	1.78E-1	4.86E-3	2.16E-2	2.91E-4	-6.60E-2	1.39E-1
ETP-fw	CTUe	4.18E+1	4.60E+0	3.91E+0	5.03E+1	9.03E-1	8.19E+0	5.51E-2	-1.69E+1	4.26E+1
HTP-c	CTUh	2.25E-9	2.45E-10	1.54E-10	2.65E-9	3.21E-11	1.01E-9	1.55E-12	-7.65E-10	2.93E-9
HTP-nc	CTUh	4.60E-8	4.26E-9	4.21E-9	5.44E-8	1.08E-9	1.25E-8	3.52E-11	-1.20E-8	5.60E-8
SQP	Pt	9.62E+0	2.47E+0	1.84E-1	1.23E+1	9.51E-1	5.72E+0	1.60E-1	-3.57E+0	1.55E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.85E+0	5.52E-2	8.84E+0	1.27E+1	1.59E-2	3.52E-1	2.45E-3	-1.58E+0	1.15E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.85E+0	5.52E-2	8.84E+0	1.27E+1	1.59E-2	3.52E-1	2.45E-3	-1.58E+0	1.15E+1
PENRE	MJ	2.19E+2	6.69E+0	1.49E+0	2.27E+2	1.18E+0	7.61E+0	6.64E-2	-1.21E+2	1.15E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.19E+2	6.69E+0	1.49E+0	2.27E+2	1.18E+0	7.61E+0	6.64E-2	-1.21E+2	1.15E+2
PET	MJ	2.23E+2	6.75E+0	1.03E+1	2.40E+2	1.20E+0	7.97E+0	6.89E-2	-1.23E+2	1.27E+2
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	7.51E-2	4.82E-4	2.15E-2	9.70E-2	1.26E-4	4.15E-3	7.72E-5	-3.26E-2	6.88E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.47E-5	9.33E-6	2.13E-6	4.61E-5	2.84E-6	1.18E-5	7.55E-8	-3.86E-5	2.22E-5
NHWD	kg	2.75E-1	1.49E-1	6.54E-3	4.31E-1	6.89E-2	3.65E-1	2.75E-1	-9.23E-2	1.05E+0
RWD	kg	1.31E-4	4.30E-5	5.93E-6	1.80E-4	7.56E-6	2.74E-5	4.09E-7	-6.19E-5	1.53E-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
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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