

Environmental Profile

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

Ecochain v3.5.64



Product: 3054171 - PP ML Pipe GY 125 SN8 L=6
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	1.49E+1	1.66E+0	8.51E-1	1.74E+1	2.86E-1	6.54E+0	9.22E-2	-9.00E+0	1.53E+1
GWP-f	kg CO2 eq	1.48E+1	1.66E+0	6.17E-1	1.71E+1	2.86E-1	6.52E+0	9.22E-2	-8.97E+0	1.51E+1
GWP-b	kg CO2 eq	4.39E-2	6.57E-4	1.62E-1	2.07E-1	1.74E-4	1.55E-2	8.38E-5	-3.17E-2	1.91E-1
GWP-luluc	kg CO2 eq	1.98E-2	6.50E-4	7.17E-2	9.22E-2	1.01E-4	1.61E-3	1.86E-6	-1.76E-3	9.21E-2
ODP	kg CFC11 eq	2.86E-7	3.64E-7	6.99E-8	7.19E-7	6.59E-8	2.11E-7	3.02E-9	-3.32E-7	6.67E-7
AP	mol H+ eq	5.39E-2	1.40E-2	5.23E-3	7.31E-2	1.63E-3	8.64E-3	6.92E-5	-2.55E-2	5.80E-2
EP-fw	kg P eq	2.29E-4	1.58E-5	1.14E-5	2.56E-4	2.35E-6	4.64E-5	8.26E-8	-1.02E-4	2.03E-4
EP-m	kg N eq	9.04E-3	4.38E-3	1.55E-3	1.50E-2	5.83E-4	2.47E-3	4.08E-5	-4.50E-3	1.36E-2
EP-T	mol N eq	1.02E-1	4.84E-2	1.70E-2	1.68E-1	6.42E-3	2.72E-2	2.82E-4	-5.00E-2	1.51E-1
POCP	kg NMVOC eq	4.60E-2	1.34E-2	4.72E-3	6.41E-2	1.84E-3	8.66E-3	1.00E-4	-2.30E-2	5.18E-2
ADP-mm	kg Sb eq	2.44E-4	3.91E-5	1.86E-5	3.01E-4	7.40E-6	3.50E-5	6.84E-8	-5.93E-5	2.84E-4
ADP-f	MJ	5.23E+2	2.47E+1	6.13E+0	5.54E+2	4.39E+0	2.80E+1	2.15E-1	-2.82E+2	3.04E+2
WDP	m3 depriv.	1.05E+1	8.37E-2	3.95E+0	1.45E+1	1.35E-2	5.39E-1	1.04E-3	-4.95E+0	1.01E+1
PM	disease inc.	4.74E-7	1.40E-7	8.82E-8	7.02E-7	2.58E-8	1.45E-7	1.46E-9	-2.14E-7	6.61E-7
IR	kBq U-235 eq	2.81E-1	1.04E-1	1.82E-2	4.03E-1	1.92E-2	8.47E-2	9.83E-4	-1.35E-1	3.74E-1
ETP-fw	CTUe	9.31E+1	2.15E+1	1.71E+1	1.32E+2	3.57E+0	3.13E+1	1.66E-1	-4.00E+1	1.27E+2
HTP-c	CTUh	4.18E-9	7.40E-10	6.75E-10	5.59E-9	1.27E-10	3.57E-9	4.67E-12	-1.51E-9	7.79E-9
HTP-nc	CTUh	1.05E-7	2.31E-8	1.84E-8	1.47E-7	4.25E-9	4.55E-8	1.05E-10	-3.71E-8	1.59E-7
SQP	Pt	2.18E+1	1.99E+1	8.06E-1	4.26E+1	3.76E+0	2.26E+1	5.35E-1	-7.87E+0	6.16E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.07E+0	2.96E-1	3.87E+1	4.70E+1	6.30E-2	1.38E+0	7.16E-3	-3.60E+0	4.49E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.07E+0	2.96E-1	3.87E+1	4.70E+1	6.30E-2	1.38E+0	7.16E-3	-3.60E+0	4.49E+1
PENRE	MJ	5.61E+2	2.62E+1	6.51E+0	5.94E+2	4.66E+0	2.99E+1	2.29E-1	-3.04E+2	3.25E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.61E+2	2.62E+1	6.51E+0	5.94E+2	4.66E+0	2.99E+1	2.29E-1	-3.04E+2	3.25E+2
PET	MJ	5.69E+2	2.65E+1	4.52E+1	6.41E+2	4.72E+0	3.13E+1	2.36E-1	-3.08E+2	3.70E+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	1.62E-1	2.86E-3	9.39E-2	2.58E-1	4.97E-4	1.56E-2	2.63E-4	-7.50E-2	2.00E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.38E-5	5.92E-5	9.34E-6	1.42E-4	1.12E-5	4.53E-5	2.55E-7	-6.82E-5	1.31E-4
NHWD	kg	6.52E-1	1.44E+0	2.86E-2	2.12E+0	2.72E-1	1.37E+0	1.09E+0	-2.22E-1	4.63E+0
RWD	kg	2.45E-4	1.63E-4	2.59E-5	4.33E-4	2.99E-5	1.08E-4	1.42E-6	-1.21E-4	4.51E-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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