

Environmental Profile

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

Ecochain v3.5.64



Product: 3054172 - PP ML Pipe BR 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	1.48E+1	1.66E+0	8.51E-1	1.73E+1	2.84E-1	6.46E+0	9.13E-2	-8.91E+0	1.52E+1
GWP-f	kg CO2 eq	1.47E+1	1.66E+0	6.17E-1	1.70E+1	2.84E-1	6.47E+0	9.13E-2	-8.88E+0	1.49E+1
GWP-b	kg CO2 eq	6.88E-2	6.56E-4	1.62E-1	2.32E-1	1.72E-4	-9.85E-3	8.30E-5	-3.13E-2	1.91E-1
GWP-luluc	kg CO2 eq	4.03E-3	6.48E-4	7.17E-2	7.64E-2	1.01E-4	1.60E-3	1.84E-6	-1.75E-3	7.64E-2
ODP	kg CFC11 eq	2.82E-7	3.63E-7	6.99E-8	7.14E-7	6.55E-8	2.09E-7	2.99E-9	-3.28E-7	6.64E-7
AP	mol H+ eq	5.33E-2	1.39E-2	5.23E-3	7.25E-2	1.62E-3	8.58E-3	6.86E-5	-2.52E-2	5.75E-2
EP-fw	kg P eq	2.26E-4	1.57E-5	1.14E-5	2.53E-4	2.34E-6	4.61E-5	8.18E-8	-1.01E-4	2.00E-4
EP-m	kg N eq	8.82E-3	4.36E-3	1.55E-3	1.47E-2	5.79E-4	2.46E-3	4.05E-5	-4.46E-3	1.33E-2
EP-T	mol N eq	1.01E-1	4.82E-2	1.70E-2	1.66E-1	6.38E-3	2.70E-2	2.80E-4	-4.95E-2	1.50E-1
POCP	kg NMVOC eq	4.55E-2	1.34E-2	4.72E-3	6.36E-2	1.82E-3	8.60E-3	9.95E-5	-2.27E-2	5.14E-2
ADP-mm	kg Sb eq	2.42E-4	3.90E-5	1.86E-5	2.99E-4	7.35E-6	3.48E-5	6.78E-8	-5.87E-5	2.83E-4
ADP-f	MJ	5.18E+2	2.46E+1	6.13E+0	5.49E+2	4.36E+0	2.79E+1	2.14E-1	-2.79E+2	3.02E+2
WDP	m3 depriv.	1.04E+1	8.35E-2	3.95E+0	1.44E+1	1.34E-2	5.35E-1	1.02E-3	-4.90E+0	1.01E+1
PM	disease inc.	4.68E-7	1.39E-7	8.82E-8	6.96E-7	2.56E-8	1.44E-7	1.45E-9	-2.12E-7	6.55E-7
IR	kBq U-235 eq	2.79E-1	1.03E-1	1.82E-2	4.00E-1	1.91E-2	8.41E-2	9.75E-4	-1.33E-1	3.71E-1
ETP-fw	CTUe	9.11E+1	2.14E+1	1.71E+1	1.30E+2	3.54E+0	3.11E+1	1.65E-1	-3.96E+1	1.25E+2
HTP-c	CTUh	4.11E-9	7.37E-10	6.75E-10	5.52E-9	1.26E-10	3.54E-9	4.62E-12	-1.49E-9	7.70E-9
HTP-nc	CTUh	1.04E-7	2.30E-8	1.84E-8	1.45E-7	4.22E-9	4.51E-8	1.04E-10	-3.66E-8	1.58E-7
SQP	Pt	2.05E+1	1.99E+1	8.06E-1	4.12E+1	3.73E+0	2.25E+1	5.30E-1	-7.79E+0	6.01E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.79E+0	2.96E-1	3.87E+1	4.67E+1	6.26E-2	1.37E+0	7.10E-3	-3.56E+0	4.46E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.79E+0	2.96E-1	3.87E+1	4.67E+1	6.26E-2	1.37E+0	7.10E-3	-3.56E+0	4.46E+1
PENRE	MJ	5.56E+2	2.61E+1	6.51E+0	5.89E+2	4.63E+0	2.97E+1	2.27E-1	-3.01E+2	3.22E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.56E+2	2.61E+1	6.51E+0	5.89E+2	4.63E+0	2.97E+1	2.27E-1	-3.01E+2	3.22E+2
PET	MJ	5.64E+2	2.64E+1	4.52E+1	6.35E+2	4.69E+0	3.10E+1	2.34E-1	-3.04E+2	3.67E+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	1.59E-1	2.85E-3	9.39E-2	2.56E-1	4.93E-4	1.55E-2	2.61E-4	-7.43E-2	1.98E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.30E-5	5.91E-5	9.34E-6	1.41E-4	1.12E-5	4.50E-5	2.53E-7	-6.76E-5	1.30E-4
NHWD	kg	6.44E-1	1.44E+0	2.86E-2	2.11E+0	2.70E-1	1.36E+0	1.08E+0	-2.19E-1	4.60E+0
RWD	kg	2.42E-4	1.63E-4	2.59E-5	4.31E-4	2.97E-5	1.07E-4	1.41E-6	-1.20E-4	4.49E-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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