

Environmental Profile

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

Ecochain v3.5.64



Product: 3072691 - PE Outlet-Pipe BK 110x4,3 L=5 *SE S12,5
 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

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]; **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	1.23E+0	5.16E-1	1.65E+1	1.92E-1	6.23E+0	1.06E-1	-9.60E+0	1.35E+1
GWP-f	kg CO2 eq	1.47E+1	1.23E+0	3.74E-1	1.63E+1	1.92E-1	6.24E+0	1.06E-1	-9.56E+0	1.33E+1
GWP-b	kg CO2 eq	7.70E-2	-8.31E-5	9.83E-2	1.75E-1	1.16E-4	-7.67E-3	7.96E-5	-3.63E-2	1.31E-1
GWP-luluc	kg CO2 eq	4.65E-3	7.29E-4	4.35E-2	4.88E-2	6.79E-5	1.08E-3	1.54E-6	-2.18E-3	4.78E-2
ODP	kg CFC11 eq	3.92E-7	2.55E-7	4.23E-8	6.90E-7	4.42E-8	1.40E-7	2.27E-9	-4.57E-7	4.19E-7
AP	mol H+ eq	5.39E-2	3.00E-2	3.17E-3	8.70E-2	1.09E-3	5.89E-3	5.42E-5	-2.65E-2	6.76E-2
EP-fw	kg P eq	2.54E-4	7.33E-6	6.90E-6	2.69E-4	1.58E-6	3.11E-5	7.09E-8	-1.19E-4	1.82E-4
EP-m	kg N eq	9.15E-3	7.60E-3	9.38E-4	1.77E-2	3.91E-4	1.71E-3	3.81E-5	-4.84E-3	1.50E-2
EP-T	mol N eq	1.04E-1	8.44E-2	1.03E-2	1.98E-1	4.31E-3	1.89E-2	2.20E-4	-5.39E-2	1.68E-1
POCP	kg NMVOC eq	4.91E-2	2.21E-2	2.86E-3	7.41E-2	1.23E-3	5.96E-3	8.61E-5	-2.51E-2	5.62E-2
ADP-mm	kg Sb eq	2.01E-4	1.60E-5	1.12E-5	2.28E-4	4.96E-6	2.33E-5	5.46E-8	-6.19E-5	1.95E-4
ADP-f	MJ	5.13E+2	1.66E+1	3.71E+0	5.34E+2	2.94E+0	1.87E+1	1.66E-1	-2.87E+2	2.68E+2
WDP	m3 depriv.	1.17E+1	3.64E-2	2.39E+0	1.42E+1	9.03E-3	3.67E-1	8.29E-4	-5.58E+0	8.97E+0
PM	disease inc.	4.49E-7	6.04E-8	5.34E-8	5.62E-7	1.73E-8	9.70E-8	1.14E-9	-2.10E-7	4.68E-7
IR	kBq U-235 eq	3.48E-1	7.08E-2	1.10E-2	4.30E-1	1.29E-2	5.63E-2	7.71E-4	-1.73E-1	3.27E-1
ETP-fw	CTUe	8.82E+1	1.21E+1	1.04E+1	1.11E+2	2.39E+0	2.12E+1	1.46E-1	-4.17E+1	9.28E+1
HTP-c	CTUh	4.24E-9	6.50E-10	4.09E-10	5.29E-9	8.51E-11	2.56E-9	4.08E-12	-1.98E-9	5.96E-9
HTP-nc	CTUh	9.58E-8	1.12E-8	1.11E-8	1.18E-7	2.85E-9	3.19E-8	9.31E-11	-4.44E-8	1.09E-7
SQP	Pt	2.02E+1	6.45E+0	4.88E-1	2.72E+1	2.52E+0	1.49E+1	4.25E-1	-9.10E+0	3.59E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.76E+0	1.45E-1	2.34E+1	3.23E+1	4.22E-2	9.22E-1	6.52E-3	-4.15E+0	2.91E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.76E+0	1.45E-1	2.34E+1	3.23E+1	4.22E-2	9.22E-1	6.52E-3	-4.15E+0	2.91E+1
PENRE	MJ	5.51E+2	1.77E+1	3.94E+0	5.72E+2	3.13E+0	1.99E+1	1.76E-1	-3.10E+2	2.86E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.51E+2	1.77E+1	3.94E+0	5.72E+2	3.13E+0	1.99E+1	1.76E-1	-3.10E+2	2.86E+2
PET	MJ	5.60E+2	1.78E+1	2.74E+1	6.05E+2	3.17E+0	2.08E+1	1.82E-1	-3.14E+2	3.15E+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	1.79E-1	1.27E-3	5.69E-2	2.37E-1	3.33E-4	1.08E-2	2.04E-4	-8.52E-2	1.63E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.51E-5	2.45E-5	5.65E-6	1.05E-4	7.53E-6	3.05E-5	1.99E-7	-8.40E-5	5.94E-5
NHWD	kg	5.73E-1	3.89E-1	1.73E-2	9.79E-1	1.82E-1	9.19E-1	7.29E-1	-2.34E-1	2.58E+0
RWD	kg	3.11E-4	1.14E-4	1.57E-5	4.40E-4	2.00E-5	7.13E-5	1.08E-6	-1.61E-4	3.72E-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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