

Environmental Profile

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

Ecochain v4.3.1



Product: 4055571 - Wavin XL Pipe BK 1600 SN4 L=6 S/SP EF
Unit: 1 piece
Manufacturer: Wavin - SE - Eskilstuna - KRAH pipes

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
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 - KRAH pipes (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	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 EN15804+A2 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF EN15804+A2 Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF EN15804+A2 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]

Statement of Confidentiality

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Results

Environmental impact	Unit	A1	A1-A3	Total
GWP-total	kg CO2 eq	2.302E+3	2.302E+3	2.302E+3
GWP-f	kg CO2 eq	2.273E+3	2.273E+3	2.273E+3
GWP-b	kg CO2 eq	2.018E+1	2.018E+1	2.018E+1
GWP-luluc	kg CO2 eq	9.969E-1	9.969E-1	9.969E-1
ODP	kg CFC11 eq	1.911E-4	1.911E-4	1.911E-4
AP	mol H+ eq	8.841E+0	8.841E+0	8.841E+0
EP-fw	kg P eq	3.236E-2	3.236E-2	3.236E-2
EP-m	kg N eq	2.558E+0	2.558E+0	2.558E+0
EP-T	mol N eq	2.788E+1	2.788E+1	2.788E+1
POCP	kg NMVOC eq	8.876E+0	8.876E+0	8.876E+0
ADP-mm	kg Sb eq	2.639E-2	2.639E-2	2.639E-2
ADP-f	MJ	3.815E+4	3.815E+4	3.815E+4
WDP	m3 depriv.	1.922E+3	1.922E+3	1.922E+3
PM	disease inc.	6.178E-5	6.178E-5	6.178E-5
IR	kBq U-235 eq	4.644E+1	4.644E+1	4.644E+1
ETP-fw	CTUe	1.824E+4	1.824E+4	1.824E+4
HTP-c	CTUh	4.896E-7	4.896E-7	4.896E-7
HTP-nc	CTUh	1.390E-5	1.390E-5	1.390E-5
SQP	Pt	1.618E+3	1.618E+3	1.618E+3
Resource use	Unit	A1	A1-A3	Total
PERE	MJ	1.067E+3	1.067E+3	1.067E+3
PERM	MJ	3.610E+2	3.610E+2	3.610E+2
PERT	MJ	1.428E+3	1.428E+3	1.428E+3
PENRE	MJ	2.333E+4	2.333E+4	2.333E+4
PENRM	MJ	7.468E+3	7.468E+3	7.468E+3
PENRT	MJ	3.080E+4	3.080E+4	3.080E+4
PET	MJ	3.223E+4	3.223E+4	3.223E+4
SM	kg	4.630E+2	4.630E+2	4.630E+2
RSF	MJ	0	0	0
NRSF	MJ	0	0	0
FW	m3	3.608E+1	3.608E+1	3.608E+1

Output flows and waste categories	Unit	A1	A1-A3	Total
HWD	kg	4.072E+1	4.072E+1	4.072E+1
NHWD	kg	1.686E+3	1.686E+3	1.686E+3
RWD	kg	9.309E-2	9.309E-2	9.309E-2
CRU	kg	0	0	0
MFR	kg	5.380E+2	5.380E+2	5.380E+2
MER	kg	1.759E+2	1.759E+2	1.759E+2
EE	MJ	2.498E+3	2.498E+3	2.498E+3
EET	MJ	1.580E+3	1.580E+3	1.580E+3
EEE	MJ	9.176E+2	9.176E+2	9.176E+2



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