

Environmental Profile

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

Ecochain v3.5.80



Product: 3044810 - EK PPR Pipe GY 125x11,4 PN10 L=4
Unit: 1 piece
Manufacturer: Wavin - CZ - Horni Pocernice
Location: Czechia
Address: Do Čertous 2659
193 00 Horní Počernice
Czech Republic

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 04-10-2022
End of validity: 04-10-2027
Verifier: Martijn van Hövell - SGS Search



Use the Ekoplastik System when you prefer an all-plastic welded system or when you need pipes with larger diameters. The Ekoplastik system offers a maximum pipe diameter of 250 mm. Join pipes and fittings using a homogenous weld for secure and permanent connections.

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 - CZ - Horni Pocernice (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 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	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.19E+1	3.54E+0	4.62E-1	3.59E+1	4.10E-1	1.24E+1	1.93E-1	-1.93E+1	2.96E+1
GWP-f	kg CO2 eq	3.18E+1	3.53E+0	3.76E-1	3.57E+1	4.09E-1	1.24E+1	1.93E-1	-1.92E+1	2.95E+1
GWP-b	kg CO2 eq	1.29E-1	2.15E-3	7.89E-2	2.10E-1	2.49E-4	-1.64E-2	1.68E-4	-6.67E-2	1.27E-1
GWP-luluc	kg CO2 eq	8.75E-3	1.25E-3	7.55E-3	1.75E-2	1.45E-4	2.30E-3	3.32E-6	-3.69E-3	1.63E-2
ODP	kg CFC11 eq	6.02E-7	8.14E-7	4.71E-7	1.89E-6	9.44E-8	3.00E-7	4.84E-9	-7.27E-7	1.56E-6
AP	mol H+ eq	1.15E-1	2.01E-2	4.14E-3	1.40E-1	2.33E-3	1.26E-2	1.16E-4	-5.36E-2	1.01E-1
EP-fw	kg P eq	4.81E-4	2.91E-5	1.88E-5	5.29E-4	3.37E-6	6.64E-5	1.52E-7	-2.10E-4	3.89E-4
EP-m	kg N eq	1.90E-2	7.20E-3	8.01E-4	2.70E-2	8.34E-4	3.68E-3	7.49E-5	-9.49E-3	2.21E-2
EP-T	mol N eq	2.17E-1	7.94E-2	9.39E-3	3.06E-1	9.20E-3	4.05E-2	4.69E-4	-1.05E-1	2.51E-1
POCP	kg NMVOC eq	9.85E-2	2.27E-2	2.07E-3	1.23E-1	2.63E-3	1.28E-2	1.76E-4	-4.84E-2	9.05E-2
ADP-mm	kg Sb eq	5.45E-4	9.14E-5	3.64E-5	6.73E-4	1.06E-5	4.99E-5	1.17E-7	-1.26E-4	6.08E-4
ADP-f	MJ	1.12E+3	5.42E+1	1.21E+2	1.30E+3	6.28E+0	4.00E+1	3.54E-1	-6.04E+2	7.39E+2
WDP	m3 depriv.	2.24E+1	1.66E-1	1.92E+0	2.45E+1	1.93E-2	7.83E-1	1.92E-3	-1.04E+1	1.49E+1
PM	disease inc.	1.01E-6	3.19E-7	3.05E-8	1.36E-6	3.70E-8	2.08E-7	2.43E-9	-4.47E-7	1.16E-6
IR	kBq U-235 eq	5.84E-1	2.37E-1	1.43E+0	2.25E+0	2.75E-2	1.20E-1	1.64E-3	-2.80E-1	2.12E+0
ETP-fw	CTUe	1.80E+2	4.40E+1	4.13E+1	2.65E+2	5.10E+0	4.51E+1	2.96E-1	-7.43E+1	2.42E+2
HTP-c	CTUh	7.83E-9	1.57E-9	7.86E-10	1.02E-8	1.82E-10	5.56E-9	8.74E-12	-3.18E-9	1.28E-8
HTP-nc	CTUh	2.12E-7	5.25E-8	2.68E-8	2.92E-7	6.08E-9	6.77E-8	1.91E-10	-8.99E-8	2.76E-7
SQP	Pt	4.54E+1	4.64E+1	3.30E+1	1.25E+2	5.38E+0	3.19E+1	9.07E-1	-1.62E+1	1.47E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.66E+1	7.78E-1	1.73E+1	3.46E+1	9.02E-2	1.97E+0	1.36E-2	-7.46E+0	2.93E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.66E+1	7.78E-1	1.73E+1	3.46E+1	9.02E-2	1.97E+0	1.36E-2	-7.46E+0	2.93E+1
PENRE	MJ	1.20E+3	5.76E+1	1.21E+2	1.38E+3	6.67E+0	4.26E+1	3.75E-1	-6.51E+2	7.81E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.20E+3	5.76E+1	1.21E+2	1.38E+3	6.67E+0	4.26E+1	3.75E-1	-6.51E+2	7.81E+2
PET	MJ	1.22E+3	5.84E+1	1.38E+2	1.42E+3	6.76E+0	4.46E+1	3.89E-1	-6.58E+2	8.10E+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	3.42E-1	6.14E-3	6.36E-2	4.11E-1	7.11E-4	2.31E-2	4.35E-4	-1.56E-1	2.80E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.53E-4	1.39E-4	9.93E-7	2.92E-4	1.61E-5	6.51E-5	4.27E-7	-1.43E-4	2.31E-4
NHWD	kg	1.39E+0	3.36E+0	5.61E-3	4.76E+0	3.90E-1	1.98E+0	1.56E+0	-4.63E-1	8.22E+0
RWD	kg	5.06E-4	3.69E-4	1.34E-6	8.76E-4	4.27E-5	1.53E-4	2.31E-6	-2.52E-4	8.22E-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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