

Environmental Profile

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

Ecochain v3.5.80



Product: 3052481 - EK PPR Pipe GY 125x17,1 PN16 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	4.46E+1	4.95E+0	7.13E-1	5.02E+1	5.74E-1	1.71E+1	2.70E-1	-2.69E+1	4.13E+1
GWP-f	kg CO2 eq	4.44E+1	4.95E+0	5.80E-1	4.99E+1	5.74E-1	1.71E+1	2.71E-1	-2.68E+1	4.11E+1
GWP-b	kg CO2 eq	1.87E-1	3.00E-3	1.22E-1	3.12E-1	3.49E-4	-2.30E-2	2.35E-4	-9.34E-2	1.96E-1
GWP-luluc	kg CO2 eq	1.21E-2	1.75E-3	1.17E-2	2.55E-2	2.03E-4	3.23E-3	4.66E-6	-5.16E-3	2.38E-2
ODP	kg CFC11 eq	8.37E-7	1.14E-6	7.27E-7	2.70E-6	1.32E-7	4.20E-7	6.79E-9	-1.01E-6	2.26E-6
AP	mol H+ eq	1.61E-1	2.82E-2	6.39E-3	1.95E-1	3.27E-3	1.77E-2	1.62E-4	-7.50E-2	1.41E-1
EP-fw	kg P eq	6.67E-4	4.07E-5	2.90E-5	7.37E-4	4.72E-6	9.30E-5	2.13E-7	-2.94E-4	5.41E-4
EP-m	kg N eq	2.65E-2	1.01E-2	1.24E-3	3.78E-2	1.17E-3	5.14E-3	1.05E-4	-1.33E-2	3.09E-2
EP-T	mol N eq	3.03E-1	1.11E-1	1.45E-2	4.28E-1	1.29E-2	5.66E-2	6.58E-4	-1.47E-1	3.52E-1
POCP	kg NMVOC eq	1.37E-1	3.18E-2	3.20E-3	1.72E-1	3.69E-3	1.79E-2	2.47E-4	-6.78E-2	1.26E-1
ADP-mm	kg Sb eq	7.65E-4	1.28E-4	5.61E-5	9.49E-4	1.48E-5	6.99E-5	1.64E-7	-1.77E-4	8.58E-4
ADP-f	MJ	1.57E+3	7.60E+1	1.87E+2	1.83E+3	8.81E+0	5.60E+1	4.96E-1	-8.44E+2	1.05E+3
WDP	m3 depriv.	3.12E+1	2.33E-1	2.97E+0	3.44E+1	2.70E-2	1.10E+0	2.69E-3	-1.46E+1	2.10E+1
PM	disease inc.	1.40E-6	4.47E-7	4.70E-8	1.90E-6	5.18E-8	2.91E-7	3.41E-9	-6.26E-7	1.62E-6
IR	kBq U-235 eq	8.13E-1	3.32E-1	2.21E+0	3.35E+0	3.85E-2	1.69E-1	2.30E-3	-3.91E-1	3.17E+0
ETP-fw	CTUe	2.49E+2	6.17E+1	6.38E+1	3.75E+2	7.15E+0	6.32E+1	4.15E-1	-1.04E+2	3.42E+2
HTP-c	CTUh	1.09E-8	2.19E-9	1.21E-9	1.43E-8	2.55E-10	7.78E-9	1.23E-11	-4.45E-9	1.79E-8
HTP-nc	CTUh	2.96E-7	7.35E-8	4.14E-8	4.11E-7	8.53E-9	9.47E-8	2.68E-10	-1.26E-7	3.89E-7
SQP	Pt	6.28E+1	6.50E+1	5.09E+1	1.79E+2	7.54E+0	4.47E+1	1.27E+0	-2.26E+1	2.10E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.30E+1	1.09E+0	2.66E+1	5.07E+1	1.26E-1	2.76E+0	1.91E-2	-1.04E+1	4.32E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.30E+1	1.09E+0	2.66E+1	5.07E+1	1.26E-1	2.76E+0	1.91E-2	-1.04E+1	4.32E+1
PENRE	MJ	1.68E+3	8.06E+1	1.87E+2	1.95E+3	9.35E+0	5.97E+1	5.26E-1	-9.10E+2	1.11E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.68E+3	8.06E+1	1.87E+2	1.95E+3	9.35E+0	5.97E+1	5.26E-1	-9.10E+2	1.11E+3
PET	MJ	1.70E+3	8.17E+1	2.14E+2	2.00E+3	9.48E+0	6.24E+1	5.45E-1	-9.20E+2	1.15E+3
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	4.75E-1	8.60E-3	9.82E-2	5.82E-1	9.97E-4	3.23E-2	6.10E-4	-2.18E-1	3.98E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.13E-4	1.94E-4	1.53E-6	4.09E-4	2.25E-5	9.12E-5	5.99E-7	-1.98E-4	3.26E-4
NHWD	kg	1.94E+0	4.71E+0	8.66E-3	6.65E+0	5.46E-1	2.77E+0	2.18E+0	-6.48E-1	1.15E+1
RWD	kg	7.04E-4	5.17E-4	2.07E-6	1.22E-3	5.99E-5	2.14E-4	3.23E-6	-3.52E-4	1.15E-3
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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