

Environmental Profile

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

Ecochain v3.5.80



Product: 3044814 - EK PPR Pipe GY 25x3,5 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	1.87E+0	2.07E-1	2.94E-2	2.11E+0	2.40E-2	7.26E-1	1.13E-2	-1.13E+0	1.74E+0
GWP-f	kg CO2 eq	1.87E+0	2.06E-1	2.39E-2	2.10E+0	2.40E-2	7.27E-1	1.13E-2	-1.13E+0	1.73E+0
GWP-b	kg CO2 eq	7.44E-3	1.25E-4	5.03E-3	1.26E-2	1.45E-5	-9.60E-4	9.81E-6	-3.90E-3	7.76E-3
GWP-luluc	kg CO2 eq	5.16E-4	7.31E-5	4.81E-4	1.07E-3	8.48E-6	1.35E-4	1.95E-7	-2.16E-4	9.98E-4
ODP	kg CFC11 eq	3.55E-8	4.76E-8	3.00E-8	1.13E-7	5.52E-9	1.76E-8	2.83E-10	-4.28E-8	9.37E-8
AP	mol H+ eq	6.77E-3	1.18E-3	2.64E-4	8.21E-3	1.36E-4	7.39E-4	6.77E-6	-3.14E-3	5.96E-3
EP-fw	kg P eq	2.83E-5	1.70E-6	1.20E-6	3.12E-5	1.97E-7	3.89E-6	8.89E-9	-1.23E-5	2.30E-5
EP-m	kg N eq	1.12E-3	4.21E-4	5.10E-5	1.59E-3	4.88E-5	2.15E-4	4.38E-6	-5.56E-4	1.30E-3
EP-T	mol N eq	1.28E-2	4.64E-3	5.98E-4	1.80E-2	5.38E-4	2.37E-3	2.75E-5	-6.15E-3	1.48E-2
POCP	kg NMVOC eq	5.78E-3	1.33E-3	1.32E-4	7.24E-3	1.54E-4	7.49E-4	1.03E-5	-2.84E-3	5.32E-3
ADP-mm	kg Sb eq	3.22E-5	5.34E-6	2.32E-6	3.99E-5	6.20E-7	2.92E-6	6.84E-9	-7.37E-6	3.61E-5
ADP-f	MJ	6.57E+1	3.17E+0	7.70E+0	7.65E+1	3.68E-1	2.34E+0	2.07E-2	-3.54E+1	4.39E+1
WDP	m3 depriv.	1.31E+0	9.72E-3	1.23E-1	1.45E+0	1.13E-3	4.58E-2	1.13E-4	-6.09E-1	8.85E-1
PM	disease inc.	5.91E-8	1.86E-8	1.94E-9	7.97E-8	2.16E-9	1.22E-8	1.42E-10	-2.62E-8	6.80E-8
IR	kBq U-235 eq	3.43E-2	1.39E-2	9.11E-2	1.39E-1	1.61E-3	7.05E-3	9.58E-5	-1.64E-2	1.32E-1
ETP-fw	CTUe	1.06E+1	2.57E+0	2.63E+0	1.58E+1	2.99E-1	2.64E+0	1.73E-2	-4.35E+0	1.44E+1
HTP-c	CTUh	4.61E-10	9.16E-11	5.00E-11	6.02E-10	1.06E-11	3.26E-10	5.12E-13	-1.86E-10	7.54E-10
HTP-nc	CTUh	1.25E-8	3.07E-9	1.71E-9	1.73E-8	3.56E-10	3.97E-9	1.12E-11	-5.26E-9	1.63E-8
SQP	Pt	2.69E+0	2.71E+0	2.10E+0	7.50E+0	3.15E-1	1.87E+0	5.31E-2	-9.48E-1	8.79E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.77E-1	4.55E-2	1.10E+0	2.12E+0	5.28E-3	1.15E-1	7.96E-4	-4.36E-1	1.81E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.77E-1	4.55E-2	1.10E+0	2.12E+0	5.28E-3	1.15E-1	7.96E-4	-4.36E-1	1.81E+0
PENRE	MJ	7.05E+1	3.36E+0	7.72E+0	8.15E+1	3.90E-1	2.49E+0	2.20E-2	-3.81E+1	4.63E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	7.05E+1	3.36E+0	7.72E+0	8.15E+1	3.90E-1	2.49E+0	2.20E-2	-3.81E+1	4.63E+1
PET	MJ	7.14E+1	3.41E+0	8.81E+0	8.37E+1	3.96E-1	2.61E+0	2.28E-2	-3.85E+1	4.81E+1
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	2.01E-2	3.59E-4	4.05E-3	2.45E-2	4.16E-5	1.35E-3	2.55E-5	-9.11E-3	1.68E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.00E-6	8.10E-6	6.32E-8	1.72E-5	9.40E-7	3.81E-6	2.50E-8	-8.40E-6	1.35E-5
NHWD	kg	8.21E-2	1.96E-1	3.57E-4	2.79E-1	2.28E-2	1.16E-1	9.11E-2	-2.71E-2	4.82E-1
RWD	kg	2.97E-5	2.15E-5	8.56E-8	5.14E-5	2.50E-6	8.94E-6	1.35E-7	-1.48E-5	4.82E-5
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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