

Environmental Profile

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

Ecochain v3.5.80



Product: 3032800 - EK PPR Pipe GY 63x8,6 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	1.18E+1	1.31E+0	1.82E-1	1.33E+1	1.52E-1	4.55E+0	7.14E-2	-7.13E+0	1.09E+1
GWP-f	kg CO2 eq	1.17E+1	1.31E+0	1.48E-1	1.32E+1	1.51E-1	4.56E+0	7.14E-2	-7.10E+0	1.09E+1
GWP-b	kg CO2 eq	4.82E-2	7.93E-4	3.11E-2	8.01E-2	9.20E-5	-6.07E-3	6.21E-5	-2.47E-2	4.95E-2
GWP-luluc	kg CO2 eq	3.22E-3	4.62E-4	2.97E-3	6.65E-3	5.36E-5	8.51E-4	1.23E-6	-1.36E-3	6.19E-3
ODP	kg CFC11 eq	2.22E-7	3.01E-7	1.85E-7	7.08E-7	3.49E-8	1.11E-7	1.79E-9	-2.68E-7	5.88E-7
AP	mol H+ eq	4.25E-2	7.44E-3	1.63E-3	5.16E-2	8.63E-4	4.67E-3	4.28E-5	-1.98E-2	3.74E-2
EP-fw	kg P eq	1.77E-4	1.07E-5	7.40E-6	1.95E-4	1.25E-6	2.46E-5	5.61E-8	-7.75E-5	1.44E-4
EP-m	kg N eq	7.01E-3	2.66E-3	3.15E-4	9.99E-3	3.09E-4	1.36E-3	2.77E-5	-3.51E-3	8.18E-3
EP-T	mol N eq	8.01E-2	2.93E-2	3.69E-3	1.13E-1	3.40E-3	1.50E-2	1.74E-4	-3.88E-2	9.29E-2
POCP	kg NMVOC eq	3.63E-2	8.38E-3	8.15E-4	4.55E-2	9.72E-4	4.73E-3	6.51E-5	-1.79E-2	3.34E-2
ADP-mm	kg Sb eq	2.00E-4	3.38E-5	1.43E-5	2.48E-4	3.92E-6	1.84E-5	4.32E-8	-4.66E-5	2.24E-4
ADP-f	MJ	4.14E+2	2.00E+1	4.76E+1	4.82E+2	2.32E+0	1.48E+1	1.31E-1	-2.23E+2	2.76E+2
WDP	m3 depriv.	8.27E+0	6.15E-2	7.57E-1	9.09E+0	7.13E-3	2.90E-1	7.09E-4	-3.85E+0	5.54E+0
PM	disease inc.	3.71E-7	1.18E-7	1.20E-8	5.01E-7	1.37E-8	7.68E-8	8.99E-10	-1.65E-7	4.27E-7
IR	kBq U-235 eq	2.15E-1	8.76E-2	5.63E-1	8.66E-1	1.02E-2	4.45E-2	6.06E-4	-1.03E-1	8.18E-1
ETP-fw	CTUe	6.62E+1	1.63E+1	1.63E+1	9.87E+1	1.89E+0	1.67E+1	1.09E-1	-2.75E+1	8.99E+1
HTP-c	CTUh	2.88E-9	5.79E-10	3.09E-10	3.77E-9	6.72E-11	2.06E-9	3.23E-12	-1.18E-9	4.72E-9
HTP-nc	CTUh	7.83E-8	1.94E-8	1.06E-8	1.08E-7	2.25E-9	2.50E-8	7.07E-11	-3.32E-8	1.02E-7
SQP	Pt	1.66E+1	1.71E+1	1.30E+1	4.67E+1	1.99E+0	1.18E+1	3.35E-1	-5.98E+0	5.49E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.12E+0	2.88E-1	6.79E+0	1.32E+1	3.33E-2	7.29E-1	5.04E-3	-2.76E+0	1.12E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.12E+0	2.88E-1	6.79E+0	1.32E+1	3.33E-2	7.29E-1	5.04E-3	-2.76E+0	1.12E+1
PENRE	MJ	4.44E+2	2.13E+1	4.77E+1	5.13E+2	2.47E+0	1.57E+1	1.39E-1	-2.40E+2	2.91E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.44E+2	2.13E+1	4.77E+1	5.13E+2	2.47E+0	1.57E+1	1.39E-1	-2.40E+2	2.91E+2
PET	MJ	4.50E+2	2.16E+1	5.44E+1	5.26E+2	2.50E+0	1.65E+1	1.44E-1	-2.43E+2	3.02E+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	1.26E-1	2.27E-3	2.50E-2	1.53E-1	2.63E-4	8.54E-3	1.61E-4	-5.76E-2	1.05E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.60E-5	5.13E-5	3.91E-7	1.08E-4	5.94E-6	2.41E-5	1.58E-7	-5.26E-5	8.53E-5
NHWD	kg	5.10E-1	1.24E+0	2.21E-3	1.75E+0	1.44E-1	7.32E-1	5.76E-1	-1.71E-1	3.04E+0
RWD	kg	1.87E-4	1.36E-4	5.29E-7	3.23E-4	1.58E-5	5.64E-5	8.53E-7	-9.32E-5	3.03E-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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