

Environmental Profile

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

Ecochain v3.5.80



Product: 3059966 - PP-R Pipe in coil GY 20x3,2 PN16 L=200
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	5.91E+1	6.65E+0	9.54E-1	6.67E+1	7.72E-1	2.24E+1	3.63E-1	-3.58E+1	5.44E+1
GWP-f	kg CO2 eq	5.88E+1	6.65E+0	7.76E-1	6.63E+1	7.71E-1	2.24E+1	3.63E-1	-3.56E+1	5.41E+1
GWP-b	kg CO2 eq	2.70E-1	4.04E-3	1.63E-1	4.37E-1	4.68E-4	-3.09E-2	3.16E-4	-1.25E-1	2.82E-1
GWP-luluc	kg CO2 eq	1.56E-2	2.35E-3	1.56E-2	3.36E-2	2.73E-4	4.33E-3	6.25E-6	-6.92E-3	3.13E-2
ODP	kg CFC11 eq	1.10E-6	1.53E-6	9.73E-7	3.61E-6	1.78E-7	5.62E-7	9.12E-9	-1.31E-6	3.04E-6
AP	mol H+ eq	2.12E-1	3.79E-2	8.56E-3	2.59E-1	4.39E-3	2.36E-2	2.18E-4	-1.00E-1	1.87E-1
EP-fw	kg P eq	8.71E-4	5.47E-5	3.88E-5	9.65E-4	6.34E-6	1.25E-4	2.86E-7	-3.94E-4	7.03E-4
EP-m	kg N eq	3.49E-2	1.35E-2	1.65E-3	5.01E-2	1.57E-3	6.86E-3	1.41E-4	-1.77E-2	4.10E-2
EP-T	mol N eq	4.00E-1	1.49E-1	1.94E-2	5.68E-1	1.73E-2	7.56E-2	8.84E-4	-1.96E-1	4.66E-1
POCP	kg NMVOC eq	1.81E-1	4.27E-2	4.28E-3	2.28E-1	4.95E-3	2.39E-2	3.32E-4	-9.06E-2	1.67E-1
ADP-mm	kg Sb eq	1.02E-3	1.72E-4	7.51E-5	1.27E-3	1.99E-5	9.37E-5	2.20E-7	-2.37E-4	1.14E-3
ADP-f	MJ	2.08E+3	1.02E+2	2.50E+2	2.43E+3	1.18E+1	7.51E+1	6.66E-1	-1.13E+3	1.39E+3
WDP	m3 depriv.	4.14E+1	3.13E-1	3.97E+0	4.57E+1	3.63E-2	1.47E+0	3.61E-3	-1.95E+1	2.77E+1
PM	disease inc.	1.86E-6	6.00E-7	6.30E-8	2.52E-6	6.96E-8	3.90E-7	4.58E-9	-8.40E-7	2.14E-6
IR	kBq U-235 eq	1.07E+0	4.46E-1	2.95E+0	4.47E+0	5.17E-2	2.26E-1	3.08E-3	-5.23E-1	4.23E+0
ETP-fw	CTUe	3.25E+2	8.28E+1	8.54E+1	4.93E+2	9.61E+0	8.47E+1	5.57E-1	-1.39E+2	4.49E+2
HTP-c	CTUh	1.44E-8	2.95E-9	1.62E-9	1.90E-8	3.42E-10	1.04E-8	1.65E-11	-5.95E-9	2.38E-8
HTP-nc	CTUh	3.91E-7	9.88E-8	5.54E-8	5.46E-7	1.15E-8	1.27E-7	3.60E-10	-1.69E-7	5.15E-7
SQP	Pt	8.11E+1	8.73E+1	6.81E+1	2.37E+2	1.01E+1	6.00E+1	1.71E+0	-3.02E+1	2.78E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.01E+1	1.46E+0	3.56E+1	6.72E+1	1.70E-1	3.70E+0	2.56E-2	-1.40E+1	5.71E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.01E+1	1.46E+0	3.56E+1	6.72E+1	1.70E-1	3.70E+0	2.56E-2	-1.40E+1	5.71E+1
PENRE	MJ	2.23E+3	1.08E+2	2.50E+2	2.59E+3	1.26E+1	8.00E+1	7.07E-1	-1.21E+3	1.47E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.23E+3	1.08E+2	2.50E+2	2.59E+3	1.26E+1	8.00E+1	7.07E-1	-1.21E+3	1.47E+3
PET	MJ	2.26E+3	1.10E+2	2.86E+2	2.66E+3	1.27E+1	8.37E+1	7.32E-1	-1.23E+3	1.53E+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	6.25E-1	1.15E-2	1.31E-1	7.68E-1	1.34E-3	4.33E-2	8.20E-4	-2.92E-1	5.21E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.83E-4	2.61E-4	2.05E-6	5.46E-4	3.03E-5	1.22E-4	8.05E-7	-2.58E-4	4.41E-4
NHWD	kg	2.54E+0	6.32E+0	1.16E-2	8.88E+0	7.34E-1	3.68E+0	2.93E+0	-8.67E-1	1.54E+1
RWD	kg	9.29E-4	6.94E-4	2.77E-6	1.63E-3	8.05E-5	2.87E-4	4.34E-6	-4.70E-4	1.53E-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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