

Environmental Profile

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

Ecochain v3.5.80



Product: 3059949 - EK PP-RCT Pipe Basalt GY 25x3,5 L=3
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	1.45E+0	1.51E-1	2.31E-2	1.63E+0	1.83E-2	5.43E-1	8.23E-3	-8.59E-1	1.34E+0
GWP-f	kg CO2 eq	1.36E+0	1.51E-1	1.88E-2	1.53E+0	1.83E-2	5.43E-1	8.23E-3	-8.45E-1	1.26E+0
GWP-b	kg CO2 eq	9.09E-2	9.17E-5	3.95E-3	9.50E-2	1.11E-5	-7.19E-4	7.48E-6	-1.46E-2	7.97E-2
GWP-luluc	kg CO2 eq	4.66E-4	5.35E-5	3.78E-4	8.97E-4	6.48E-6	1.03E-4	1.48E-7	-1.74E-4	8.33E-4
ODP	kg CFC11 eq	3.04E-8	3.48E-8	2.36E-8	8.87E-8	4.22E-9	1.35E-8	2.17E-10	-3.23E-8	7.43E-8
AP	mol H+ eq	5.53E-3	8.61E-4	2.07E-4	6.60E-3	1.04E-4	5.65E-4	5.17E-6	-2.44E-3	4.84E-3
EP-fw	kg P eq	2.34E-5	1.24E-6	9.41E-7	2.56E-5	1.51E-7	2.97E-6	6.78E-9	-9.60E-6	1.92E-5
EP-m	kg N eq	9.39E-4	3.08E-4	4.01E-5	1.29E-3	3.73E-5	1.64E-4	3.28E-6	-4.34E-4	1.06E-3
EP-T	mol N eq	1.07E-2	3.39E-3	4.70E-4	1.46E-2	4.11E-4	1.81E-3	2.10E-5	-4.80E-3	1.20E-2
POCP	kg NMVOC eq	4.60E-3	9.70E-4	1.04E-4	5.67E-3	1.18E-4	5.72E-4	7.78E-6	-2.18E-3	4.18E-3
ADP-mm	kg Sb eq	2.46E-5	3.91E-6	1.82E-6	3.03E-5	4.74E-7	2.24E-6	5.23E-9	-5.62E-6	2.74E-5
ADP-f	MJ	4.88E+1	2.32E+0	6.05E+0	5.72E+1	2.81E-1	1.79E+0	1.58E-2	-2.67E+1	3.25E+1
WDP	m3 depriv.	9.70E-1	7.12E-3	9.62E-2	1.07E+0	8.63E-4	3.50E-2	8.58E-5	-4.60E-1	6.49E-1
PM	disease inc.	4.73E-8	1.36E-8	1.52E-9	6.25E-8	1.65E-9	9.31E-9	1.09E-10	-2.03E-8	5.33E-8
IR	kBq U-235 eq	2.73E-2	1.01E-2	7.15E-2	1.09E-1	1.23E-3	5.40E-3	7.32E-5	-1.26E-2	1.03E-1
ETP-fw	CTUe	9.10E+0	1.88E+0	2.07E+0	1.30E+1	2.28E-1	2.02E+0	1.31E-2	-3.44E+0	1.19E+1
HTP-c	CTUh	4.13E-10	6.70E-11	3.93E-11	5.19E-10	8.13E-12	2.48E-10	3.90E-13	-1.50E-10	6.25E-10
HTP-nc	CTUh	1.38E-8	2.24E-9	1.34E-9	1.74E-8	2.72E-10	3.02E-9	8.45E-12	-4.60E-9	1.61E-8
SQP	Pt	2.31E+0	1.98E+0	1.65E+0	5.95E+0	2.41E-1	1.43E+0	4.06E-2	-7.54E-1	6.91E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.79E-1	3.33E-2	8.63E-1	1.68E+0	4.03E-3	8.82E-2	6.07E-4	-3.37E-1	1.43E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.79E-1	3.33E-2	8.63E-1	1.68E+0	4.03E-3	8.82E-2	6.07E-4	-3.37E-1	1.43E+0
PENRE	MJ	5.24E+1	2.46E+0	6.06E+0	6.09E+1	2.99E-1	1.91E+0	1.68E-2	-2.88E+1	3.43E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.24E+1	2.46E+0	6.06E+0	6.09E+1	2.99E-1	1.91E+0	1.68E-2	-2.88E+1	3.43E+1
PET	MJ	5.31E+1	2.50E+0	6.92E+0	6.26E+1	3.03E-1	2.00E+0	1.74E-2	-2.91E+1	3.58E+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	1.51E-2	2.62E-4	3.18E-3	1.86E-2	3.18E-5	1.03E-3	1.95E-5	-6.92E-3	1.27E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.48E-6	5.93E-6	4.97E-8	1.35E-5	7.19E-7	2.92E-6	1.91E-8	-6.34E-6	1.08E-5
NHWD	kg	7.02E-2	1.44E-1	2.81E-4	2.14E-1	1.74E-2	8.90E-2	6.97E-2	-2.16E-2	3.69E-1
RWD	kg	2.33E-5	1.58E-5	6.72E-8	3.92E-5	1.91E-6	6.85E-6	1.03E-7	-1.13E-5	3.67E-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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