

Environmental Profile

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

Ecochain v3.5.80



Product: 3059927 - PP-R Pipe GY 25x3,5 PN16 L=4 Wood.Crate
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	1.68E+0	2.07E-1	2.97E-2	1.92E+0	2.40E-2	9.54E-1	1.13E-2	-1.16E+0	1.75E+0
GWP-f	kg CO2 eq	1.90E+0	2.07E-1	2.41E-2	2.13E+0	2.40E-2	7.28E-1	1.13E-2	-1.16E+0	1.74E+0
GWP-b	kg CO2 eq	-2.19E-1	1.26E-4	5.07E-3	-2.14E-1	1.45E-5	2.26E-1	9.81E-6	-3.90E-3	7.80E-3
GWP-luluc	kg CO2 eq	6.37E-4	7.32E-5	4.85E-4	1.20E-3	8.48E-6	1.35E-4	1.95E-7	-3.23E-4	1.02E-3
ODP	kg CFC11 eq	3.97E-8	4.76E-8	3.02E-8	1.18E-7	5.52E-9	1.78E-8	2.83E-10	-4.63E-8	9.49E-8
AP	mol H+ eq	7.00E-3	1.18E-3	2.66E-4	8.44E-3	1.36E-4	7.49E-4	6.77E-6	-3.34E-3	6.00E-3
EP-fw	kg P eq	3.00E-5	1.70E-6	1.21E-6	3.29E-5	1.97E-7	3.91E-6	8.89E-9	-1.37E-5	2.33E-5
EP-m	kg N eq	1.18E-3	4.21E-4	5.14E-5	1.65E-3	4.88E-5	2.19E-4	4.38E-6	-6.10E-4	1.31E-3
EP-T	mol N eq	1.35E-2	4.64E-3	6.03E-4	1.87E-2	5.38E-4	2.41E-3	2.75E-5	-6.79E-3	1.49E-2
POCP	kg NMVOC eq	6.05E-3	1.33E-3	1.33E-4	7.51E-3	1.54E-4	7.61E-4	1.03E-5	-3.07E-3	5.37E-3
ADP-mm	kg Sb eq	3.29E-5	5.35E-6	2.33E-6	4.05E-5	6.20E-7	2.95E-6	6.84E-9	-7.89E-6	3.62E-5
ADP-f	MJ	6.63E+1	3.17E+0	7.76E+0	7.72E+1	3.68E-1	2.36E+0	2.07E-2	-3.59E+1	4.41E+1
WDP	m3 depriv.	1.32E+0	9.74E-3	1.23E-1	1.46E+0	1.13E-3	4.59E-2	1.13E-4	-6.17E-1	8.88E-1
PM	disease inc.	6.39E-8	1.87E-8	1.96E-9	8.45E-8	2.16E-9	1.23E-8	1.42E-10	-3.02E-8	6.88E-8
IR	kBq U-235 eq	3.61E-2	1.39E-2	9.18E-2	1.42E-1	1.61E-3	7.13E-3	9.58E-5	-1.78E-2	1.33E-1
ETP-fw	CTUe	1.15E+1	2.58E+0	2.65E+0	1.67E+1	2.99E-1	2.66E+0	1.73E-2	-5.23E+0	1.45E+1
HTP-c	CTUh	5.60E-10	9.17E-11	5.04E-11	7.02E-10	1.06E-11	3.30E-10	5.12E-13	-2.68E-10	7.75E-10
HTP-nc	CTUh	1.33E-8	3.07E-9	1.72E-9	1.80E-8	3.56E-10	3.99E-9	1.12E-11	-5.95E-9	1.65E-8
SQP	Pt	2.16E+1	2.71E+0	2.12E+0	2.64E+1	3.15E-1	1.88E+0	5.31E-2	-1.68E+1	1.19E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.72E+0	4.55E-2	1.11E+0	4.87E+0	5.28E-3	1.16E-1	7.96E-4	-2.82E+0	2.18E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.72E+0	4.55E-2	1.11E+0	4.87E+0	5.28E-3	1.16E-1	7.96E-4	-2.82E+0	2.18E+0
PENRE	MJ	7.11E+1	3.37E+0	7.77E+0	8.23E+1	3.90E-1	2.51E+0	2.20E-2	-3.87E+1	4.65E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	7.11E+1	3.37E+0	7.77E+0	8.23E+1	3.90E-1	2.51E+0	2.20E-2	-3.87E+1	4.65E+1
PET	MJ	7.49E+1	3.41E+0	8.88E+0	8.71E+1	3.96E-1	2.63E+0	2.28E-2	-4.15E+1	4.87E+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	2.04E-2	3.59E-4	4.08E-3	2.48E-2	4.16E-5	1.36E-3	2.55E-5	-9.37E-3	1.69E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.05E-5	8.12E-6	6.37E-8	1.87E-5	9.40E-7	3.86E-6	2.50E-8	-9.62E-6	1.39E-5
NHWD	kg	9.28E-2	1.97E-1	3.60E-4	2.90E-1	2.28E-2	1.17E-1	9.11E-2	-3.59E-2	4.85E-1
RWD	kg	3.18E-5	2.16E-5	8.62E-8	5.35E-5	2.50E-6	9.06E-6	1.35E-7	-1.65E-5	4.87E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777