

Environmental Profile

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

Ecochain v3.5.80



Product: 3079534 - EK PP-RCT End cap GY 125
 Unit: 1 piece
 Manufacturer: Wavin - CZ - Kostelec - Verified

LCA standard: NMD Bepalingsmethode 1.1 (2022)
 Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
 Externally verified: Yes
 Issue date: 27-01-2023
 End of validity: 27-01-2028
 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 - Kostelec - Verified (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	☑	☑	☑	☑									

Product stage

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
 A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
 B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
 C4 Disposal

Benefits and loads beyond the system boundaries

D Reuse- Recovery- Recycling- potential

Environmental impacts and parameters

ECI = Environmental Costs Indicator [euro]; **ADPE** = Abiotic depletion potential for non-fossil resources [kg Sb-eq]; **ADPF** = Abiotic depletion potential for fossil resources [kg Sb-eq]; **GWP** = Global warming potential [kg CO2-eq]; **ODP** = Depletion potential of the stratospheric ozone layer [kg CFC-11-eq]; **POCP** = Formation potential of tropospheric ozone photochemical oxidants [kg ethene-eq]; **AP** = Acidification potential of land and water [kg SO2-eq]; **EP** = Eutrophication potential [kg PO4 3--eq]; **HTP** = Human toxicity potential [kg 1,4-DB-eq]; **FAETP** = Freshwater aquatic ecotoxicity potential [kg 1,4-DB-eq]; **MAETP** = Marine aquatic ecotoxicity potential [kg 1,4-DB-eq]; **TETP** = Terrestrial ecotoxicity potential [kg 1,4-DB-eq]; **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 non-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 SBK set 1	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
ECI	euro	0.13	0.01	0.02	0.15	0	0.05	0	-0.07	0.14
ADPE	kg Sb-eq	2.06E-5	2.28E-6	5.54E-6	2.84E-5	4.89E-7	2.42E-6	5.40E-9	-6.17E-6	2.52E-5
ADPF	kg Sb-eq	2.53E-2	6.42E-4	5.02E-4	2.64E-2	1.38E-4	9.21E-4	7.54E-6	-1.38E-2	1.37E-2
GWP	kg CO2-eq	1.47E+0	8.74E-2	9.00E-2	1.64E+0	1.87E-2	5.91E-1	7.60E-3	-8.97E-1	1.36E+0
ODP	kg CFC-11-eq	3.52E-8	1.62E-8	1.28E-7	1.79E-7	3.48E-9	1.23E-8	1.80E-10	-3.67E-8	1.59E-7
POCP	kg ethene-eq	1.21E-3	5.24E-5	6.01E-5	1.33E-3	1.13E-5	9.28E-5	1.73E-6	-5.91E-4	8.42E-4
AP	kg SO2-eq	4.63E-3	3.76E-4	5.36E-4	5.55E-3	8.07E-5	4.73E-4	3.97E-6	-2.26E-3	3.85E-3
EP	kg PO4 3--eq	4.55E-4	7.51E-5	7.19E-5	6.02E-4	1.61E-5	8.41E-5	1.73E-6	-2.43E-4	4.61E-4
HTP	kg 1,4-DB-eq	2.34E-1	3.74E-2	1.05E-1	3.76E-1	8.02E-3	1.87E-1	5.95E-4	-1.16E-1	4.56E-1
FAETP	kg 1,4-DB-eq	7.10E-3	1.09E-3	3.74E-3	1.19E-2	2.35E-4	4.23E-3	6.45E-4	-3.47E-3	1.36E-2
MAETP	kg 1,4-DB-eq	1.59E+1	3.91E+0	9.72E+0	2.95E+1	8.39E-1	9.71E+0	6.43E-1	-7.12E+0	3.36E+1
TETP	kg 1,4-DB-eq	1.09E-3	1.32E-4	4.73E-3	5.95E-3	2.84E-5	5.71E-4	9.71E-7	-8.97E-4	5.65E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.53E+0	8.82E-2	1.05E-1	1.73E+0	1.89E-2	6.16E-1	8.91E-3	-8.79E-1	1.49E+0
GWP-f	kg CO2 eq	1.53E+0	8.81E-2	8.45E-2	1.70E+0	1.89E-2	5.94E-1	8.91E-3	-9.28E-1	1.39E+0
GWP-b	kg CO2 eq	6.02E-3	5.35E-5	1.96E-2	2.57E-2	1.15E-5	2.22E-2	7.74E-6	4.94E-2	9.73E-2
GWP-luluc	kg CO2 eq	7.06E-4	3.12E-5	1.12E-3	1.85E-3	6.69E-6	1.08E-4	1.53E-7	-5.36E-4	1.43E-3
ODP	kg CFC11 eq	3.41E-8	2.03E-8	7.22E-8	1.27E-7	4.36E-9	1.46E-8	2.24E-10	-3.86E-8	1.07E-7
AP	mol H+ eq	5.60E-3	5.02E-4	6.78E-4	6.78E-3	1.08E-4	6.11E-4	5.34E-6	-2.73E-3	4.78E-3
EP-fw	kg P eq	2.58E-5	7.25E-7	2.57E-6	2.91E-5	1.56E-7	3.12E-6	7.01E-9	-1.42E-5	1.81E-5
EP-m	kg N eq	9.72E-4	1.80E-4	1.33E-4	1.28E-3	3.85E-5	1.80E-4	3.46E-6	-4.98E-4	1.01E-3
EP-T	mol N eq	1.08E-2	1.98E-3	1.57E-3	1.44E-2	4.25E-4	1.99E-3	2.17E-5	-5.54E-3	1.12E-2
POCP	kg NMVOC eq	4.78E-3	5.66E-4	3.75E-4	5.72E-3	1.21E-4	6.25E-4	8.13E-6	-2.41E-3	4.06E-3
ADP-mm	kg Sb eq	2.06E-5	2.28E-6	5.54E-6	2.84E-5	4.89E-7	2.42E-6	5.40E-9	-6.17E-6	2.51E-5
ADP-f	MJ	5.29E+1	1.35E+0	1.80E+1	7.23E+1	2.90E-1	1.90E+0	1.63E-2	-2.86E+1	4.60E+1
WDP	m3 depriv.	1.07E+0	4.15E-3	3.38E-1	1.41E+0	8.90E-4	3.66E-2	8.91E-5	-5.56E-1	8.89E-1
PM	disease inc.	5.03E-8	7.95E-9	6.03E-9	6.43E-8	1.71E-9	1.00E-8	1.12E-10	-2.56E-8	5.05E-8
IR	kBq U-235 eq	2.96E-2	5.91E-3	2.10E-1	2.45E-1	1.27E-3	5.78E-3	7.56E-5	-1.62E-2	2.36E-1
ETP-fw	CTUe	1.48E+1	1.10E+0	6.19E+0	2.21E+1	2.36E-1	2.18E+0	1.37E-2	-7.42E+0	1.71E+1
HTP-c	CTUh	3.63E-10	3.91E-11	1.43E-10	5.46E-10	8.38E-12	2.67E-10	4.04E-13	-1.78E-10	6.43E-10
HTP-nc	CTUh	1.03E-8	1.31E-9	4.30E-9	1.59E-8	2.81E-10	3.23E-9	8.83E-12	-5.20E-9	1.43E-8
SQP	Pt	4.00E+0	1.16E+0	4.96E+0	1.01E+1	2.48E-1	1.50E+0	4.19E-2	-1.02E+1	1.74E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.22E+0	1.94E-2	2.53E+0	3.77E+0	4.16E-3	9.25E-2	6.28E-4	-2.05E+0	1.82E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.22E+0	1.94E-2	2.53E+0	3.77E+0	4.16E-3	9.25E-2	6.28E-4	-2.05E+0	1.82E+0
PENRE	MJ	5.68E+1	1.44E+0	1.81E+1	7.63E+1	3.08E-1	2.02E+0	1.73E-2	-3.08E+1	4.79E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.68E+1	1.44E+0	1.81E+1	7.63E+1	3.08E-1	2.02E+0	1.73E-2	-3.08E+1	4.79E+1
PET	MJ	5.80E+1	1.45E+0	2.07E+1	8.01E+1	3.12E-1	2.11E+0	1.80E-2	-3.28E+1	4.97E+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	1.67E-2	1.53E-4	1.06E-2	2.75E-2	3.28E-5	1.09E-3	2.01E-5	-9.17E-3	1.95E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.12E-6	3.46E-6	6.14E-7	1.12E-5	7.42E-7	3.15E-6	1.97E-8	-7.49E-6	7.61E-6
NHWD	kg	6.58E-2	8.38E-2	1.73E-2	1.67E-1	1.80E-2	9.44E-2	7.19E-2	-2.56E-2	3.26E-1
RWD	kg	2.59E-5	9.20E-6	9.20E-7	3.60E-5	1.97E-6	7.37E-6	1.07E-7	-1.48E-5	3.07E-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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