

Environmental Profile

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

Ecochain v3.5.80



Product: 3079532 - EK PP-RCT End cap GY 110
 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	MND	MND	MND	MND	MND	MND	MND	MND	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	0.08	0.01	0.02	0.1	0	0.03	0	-0.04	0.1
ADPE	kg Sb-eq	1.49E-5	1.48E-6	6.33E-6	2.27E-5	3.16E-7	1.50E-6	3.49E-9	-3.78E-6	2.07E-5
ADPF	kg Sb-eq	1.63E-2	4.16E-4	4.67E-4	1.72E-2	8.90E-5	5.82E-4	4.87E-6	-8.86E-3	8.97E-3
GWP	kg CO2-eq	9.32E-1	5.67E-2	8.43E-2	1.07E+0	1.21E-2	3.89E-1	4.91E-3	-5.68E-1	9.11E-1
ODP	kg CFC-11-eq	1.98E-8	1.05E-8	1.47E-7	1.78E-7	2.25E-9	7.62E-9	1.16E-10	-2.18E-8	1.66E-7
POCP	kg ethene-eq	7.85E-4	3.40E-5	6.14E-5	8.81E-4	7.27E-6	5.77E-5	1.12E-6	-3.69E-4	5.77E-4
AP	kg SO2-eq	2.94E-3	2.44E-4	5.89E-4	3.78E-3	5.21E-5	2.95E-4	2.57E-6	-1.34E-3	2.78E-3
EP	kg PO4 3--eq	2.68E-4	4.87E-5	7.54E-5	3.92E-4	1.04E-5	5.21E-5	1.12E-6	-1.23E-4	3.32E-4
HTP	kg 1,4-DB-eq	1.48E-1	2.42E-2	1.03E-1	2.75E-1	5.18E-3	1.19E-1	3.85E-4	-6.62E-2	3.33E-1
FAETP	kg 1,4-DB-eq	3.52E-3	7.10E-4	3.72E-3	7.94E-3	1.52E-4	2.74E-3	4.16E-4	-1.32E-3	9.93E-3
MAETP	kg 1,4-DB-eq	9.80E+0	2.54E+0	1.04E+1	2.28E+1	5.42E-1	6.06E+0	4.15E-1	-4.01E+0	2.58E+1
TETP	kg 1,4-DB-eq	6.12E-4	8.59E-5	5.46E-3	6.16E-3	1.84E-5	3.66E-4	6.28E-7	-2.66E-4	6.28E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	9.76E-1	5.72E-2	9.99E-2	1.13E+0	1.22E-2	3.90E-1	5.76E-3	-5.89E-1	9.53E-1
GWP-f	kg CO2 eq	9.73E-1	5.71E-2	8.07E-2	1.11E+0	1.22E-2	3.90E-1	5.76E-3	-5.88E-1	9.31E-1
GWP-b	kg CO2 eq	3.18E-3	3.47E-5	1.79E-2	2.11E-2	7.42E-6	6.11E-5	5.00E-6	-7.36E-4	2.05E-2
GWP-luluc	kg CO2 eq	2.86E-4	2.02E-5	1.29E-3	1.60E-3	4.32E-6	6.89E-5	9.93E-8	-1.20E-4	1.55E-3
ODP	kg CFC11 eq	1.88E-8	1.32E-8	8.21E-8	1.14E-7	2.81E-9	9.02E-9	1.44E-10	-2.32E-8	1.03E-7
AP	mol H+ eq	3.54E-3	3.25E-4	7.45E-4	4.61E-3	6.96E-5	3.81E-4	3.45E-6	-1.62E-3	3.45E-3
EP-fw	kg P eq	1.51E-5	4.70E-7	2.70E-6	1.83E-5	1.01E-7	1.99E-6	4.53E-9	-6.40E-6	1.40E-5
EP-m	kg N eq	5.87E-4	1.16E-4	1.37E-4	8.40E-4	2.49E-5	1.11E-4	2.23E-6	-2.88E-4	6.91E-4
EP-T	mol N eq	6.66E-3	1.28E-3	1.71E-3	9.64E-3	2.74E-4	1.23E-3	1.40E-5	-3.19E-3	7.97E-3
POCP	kg NMVOC eq	3.03E-3	3.67E-4	3.94E-4	3.79E-3	7.84E-5	3.87E-4	5.25E-6	-1.46E-3	2.80E-3
ADP-mm	kg Sb eq	1.49E-5	1.48E-6	6.33E-6	2.27E-5	3.16E-7	1.50E-6	3.49E-9	-3.78E-6	2.07E-5
ADP-f	MJ	3.41E+1	8.77E-1	2.08E+1	5.58E+1	1.87E-1	1.20E+0	1.06E-2	-1.83E+1	3.89E+1
WDP	m3 depriv.	6.87E-1	2.69E-3	3.61E-1	1.05E+0	5.75E-4	2.34E-2	5.79E-5	-3.13E-1	7.61E-1
PM	disease inc.	3.08E-8	5.16E-9	6.10E-9	4.20E-8	1.10E-9	6.24E-9	7.26E-11	-1.35E-8	3.59E-8
IR	kBq U-235 eq	1.81E-2	3.83E-3	2.44E-1	2.66E-1	8.19E-4	3.61E-3	4.88E-5	-8.50E-3	2.62E-1
ETP-fw	CTUe	5.79E+0	7.12E-1	6.96E+0	1.35E+1	1.52E-1	1.36E+0	8.83E-3	-2.33E+0	1.26E+1
HTP-c	CTUh	2.33E-10	2.53E-11	1.49E-10	4.07E-10	5.42E-12	1.69E-10	2.61E-13	-9.66E-11	4.86E-10
HTP-nc	CTUh	6.45E-9	8.49E-10	4.74E-9	1.20E-8	1.81E-10	2.05E-9	5.71E-12	-2.72E-9	1.16E-8
SQP	Pt	1.42E+0	7.50E-1	5.70E+0	7.87E+0	1.60E-1	9.57E-1	2.71E-2	-7.15E-1	8.30E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.32E-1	1.26E-2	2.95E+0	3.49E+0	2.69E-3	5.90E-2	4.06E-4	-2.64E-1	3.29E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.32E-1	1.26E-2	2.95E+0	3.49E+0	2.69E-3	5.90E-2	4.06E-4	-2.64E-1	3.29E+0
PENRE	MJ	3.66E+1	9.31E-1	2.09E+1	5.84E+1	1.99E-1	1.28E+0	1.12E-2	-1.97E+1	4.02E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.66E+1	9.31E-1	2.09E+1	5.84E+1	1.99E-1	1.28E+0	1.12E-2	-1.97E+1	4.02E+1
PET	MJ	3.71E+1	9.44E-1	2.38E+1	6.19E+1	2.02E-1	1.34E+0	1.16E-2	-1.99E+1	4.35E+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	1.06E-2	9.92E-5	1.16E-2	2.23E-2	2.12E-5	6.95E-4	1.30E-5	-4.71E-3	1.84E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.40E-6	2.24E-6	3.76E-7	7.01E-6	4.79E-7	1.96E-6	1.28E-8	-4.54E-6	4.92E-6
NHWD	kg	4.09E-2	5.44E-2	1.07E-2	1.06E-1	1.16E-2	6.02E-2	4.65E-2	-1.40E-2	2.10E-1
RWD	kg	1.56E-5	5.96E-6	5.62E-7	2.22E-5	1.27E-6	4.58E-6	6.88E-8	-7.69E-6	2.04E-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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