

Environmental Profile

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

Ecochain v3.5.80



Product: 3079527 - EK PP-RCT End cap GY 75
Unit: 1 piece
Manufacturer: Wavin - CZ - Kostelec - Verified

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.

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



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					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

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 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	0.03	0	0.01	0.04	0	0.01	0	-0.02	0.04
ADPE	kg Sb-eq	6.00E-6	6.02E-7	2.43E-6	9.04E-6	1.26E-7	6.23E-7	1.39E-9	-1.59E-6	8.19E-6
ADPF	kg Sb-eq	6.52E-3	1.70E-4	1.84E-4	6.87E-3	3.55E-5	2.38E-4	1.94E-6	-3.56E-3	3.58E-3
GWP	kg CO2-eq	3.80E-1	2.31E-2	3.32E-2	4.36E-1	4.83E-3	1.53E-1	1.96E-3	-2.31E-1	3.64E-1
ODP	kg CFC-11-eq	9.19E-9	4.28E-9	5.66E-8	7.01E-8	8.96E-10	3.18E-9	4.64E-11	-9.48E-9	6.48E-8
POCP	kg ethene-eq	3.14E-4	1.39E-5	2.39E-5	3.52E-4	2.90E-6	2.39E-5	4.46E-7	-1.52E-4	2.27E-4
AP	kg SO2-eq	1.20E-3	9.94E-5	2.28E-4	1.53E-3	2.08E-5	1.22E-4	1.02E-6	-5.82E-4	1.09E-3
EP	kg PO4 3--eq	1.19E-4	1.98E-5	2.93E-5	1.68E-4	4.15E-6	2.17E-5	4.46E-7	-6.28E-5	1.31E-4
HTP	kg 1,4-DB-eq	6.17E-2	9.88E-3	4.03E-2	1.12E-1	2.07E-3	4.82E-2	1.53E-4	-3.00E-2	1.32E-1
FAETP	kg 1,4-DB-eq	1.86E-3	2.89E-4	1.45E-3	3.61E-3	6.05E-5	1.09E-3	1.66E-4	-9.00E-4	4.03E-3
MAETP	kg 1,4-DB-eq	4.15E+0	1.03E+0	4.04E+0	9.23E+0	2.16E-1	2.51E+0	1.66E-1	-1.84E+0	1.03E+1
TETP	kg 1,4-DB-eq	2.90E-4	3.50E-5	2.10E-3	2.42E-3	7.32E-6	1.47E-4	2.50E-7	-2.33E-4	2.34E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.97E-1	2.33E-2	3.93E-2	4.60E-1	4.87E-3	1.59E-1	2.29E-3	-2.27E-1	4.00E-1
GWP-f	kg CO2 eq	3.96E-1	2.33E-2	3.17E-2	4.51E-1	4.87E-3	1.53E-1	2.30E-3	-2.39E-1	3.72E-1
GWP-b	kg CO2 eq	1.56E-3	1.41E-5	7.09E-3	8.66E-3	2.96E-6	5.79E-3	1.99E-6	1.29E-2	2.74E-2
GWP-luluc	kg CO2 eq	1.84E-4	8.24E-6	4.97E-4	6.89E-4	1.72E-6	2.78E-5	3.96E-8	-1.39E-4	5.79E-4
ODP	kg CFC11 eq	8.92E-9	5.36E-9	3.16E-8	4.59E-8	1.12E-9	3.77E-9	5.76E-11	-9.98E-9	4.09E-8
AP	mol H+ eq	1.46E-3	1.33E-4	2.88E-4	1.88E-3	2.77E-5	1.58E-4	1.38E-6	-7.04E-4	1.36E-3
EP-fw	kg P eq	6.72E-6	1.92E-7	1.05E-6	7.96E-6	4.01E-8	8.05E-7	1.81E-9	-3.69E-6	5.12E-6
EP-m	kg N eq	2.53E-4	4.74E-5	5.34E-5	3.54E-4	9.93E-6	4.66E-5	8.90E-7	-1.28E-4	2.83E-4
EP-T	mol N eq	2.83E-3	5.23E-4	6.60E-4	4.01E-3	1.09E-4	5.12E-4	5.58E-6	-1.43E-3	3.21E-3
POCP	kg NMVOC eq	1.24E-3	1.49E-4	1.53E-4	1.54E-3	3.13E-5	1.61E-4	2.09E-6	-6.21E-4	1.11E-3
ADP-mm	kg Sb eq	6.00E-6	6.02E-7	2.43E-6	9.03E-6	1.26E-7	6.23E-7	1.39E-9	-1.59E-6	8.19E-6
ADP-f	MJ	1.37E+1	3.57E-1	8.00E+0	2.20E+1	7.48E-2	4.89E-1	4.21E-3	-7.36E+0	1.52E+1
WDP	m3 depriv.	2.75E-1	1.10E-3	1.40E-1	4.16E-1	2.29E-4	9.43E-3	2.31E-5	-1.44E-1	2.82E-1
PM	disease inc.	1.31E-8	2.10E-9	2.38E-9	1.76E-8	4.40E-10	2.58E-9	2.89E-11	-6.62E-9	1.40E-8
IR	kBq U-235 eq	7.67E-3	1.56E-3	9.37E-2	1.03E-1	3.27E-4	1.49E-3	1.95E-5	-4.19E-3	1.01E-1
ETP-fw	CTUe	3.89E+0	2.90E-1	2.68E+0	6.86E+0	6.07E-2	5.63E-1	3.52E-3	-1.93E+0	5.57E+0
HTP-c	CTUh	9.77E-11	1.03E-11	5.80E-11	1.66E-10	2.16E-12	6.89E-11	1.04E-13	-4.60E-11	1.91E-10
HTP-nc	CTUh	2.72E-9	3.46E-10	1.83E-9	4.90E-9	7.24E-11	8.33E-10	2.27E-12	-1.34E-9	4.46E-9
SQP	Pt	1.07E+0	3.06E-1	2.19E+0	3.57E+0	6.40E-2	3.88E-1	1.08E-2	-2.65E+0	1.38E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.18E-1	5.13E-3	1.13E+0	1.45E+0	1.07E-3	2.38E-2	1.62E-4	-5.34E-1	9.44E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.18E-1	5.13E-3	1.13E+0	1.45E+0	1.07E-3	2.38E-2	1.62E-4	-5.34E-1	9.44E-1
PENRE	MJ	1.47E+1	3.79E-1	8.02E+0	2.31E+1	7.94E-2	5.21E-1	4.46E-3	-7.94E+0	1.57E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.47E+1	3.79E-1	8.02E+0	2.31E+1	7.94E-2	5.21E-1	4.46E-3	-7.94E+0	1.57E+1
PET	MJ	1.50E+1	3.84E-1	9.15E+0	2.45E+1	8.04E-2	5.45E-1	4.63E-3	-8.47E+0	1.67E+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	4.33E-3	4.04E-5	4.49E-3	8.86E-3	8.46E-6	2.81E-4	5.18E-6	-2.37E-3	6.79E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.97E-6	9.14E-7	1.59E-7	3.04E-6	1.91E-7	8.11E-7	5.09E-9	-1.93E-6	2.11E-6
NHWD	kg	1.81E-2	2.21E-2	4.52E-3	4.48E-2	4.63E-3	2.44E-2	1.85E-2	-6.61E-3	8.57E-2
RWD	kg	6.74E-6	2.43E-6	2.37E-7	9.40E-6	5.08E-7	1.90E-6	2.74E-8	-3.83E-6	8.01E-6
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