

Environmental Profile

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

Ecochain v3.5.80



Product: 3082674 - EK PP-RCT End cap GN 63
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	0.02	0	0	0.02	0	0.01	0	-0.01	0.02
ADPE	kg Sb-eq	3.56E-6	3.41E-7	1.39E-6	5.29E-6	7.22E-8	3.42E-7	8.00E-10	-8.62E-7	4.84E-6
ADPF	kg Sb-eq	3.71E-3	9.59E-5	1.04E-4	3.91E-3	2.03E-5	1.33E-4	1.11E-6	-2.03E-3	2.04E-3
GWP	kg CO2-eq	2.14E-1	1.31E-2	1.88E-2	2.46E-1	2.77E-3	8.95E-2	1.12E-3	-1.30E-1	2.09E-1
ODP	kg CFC-11-eq	4.68E-9	2.42E-9	3.25E-8	3.96E-8	5.13E-10	1.74E-9	2.66E-11	-5.02E-9	3.68E-8
POCP	kg ethene-eq	1.80E-4	7.84E-6	1.36E-5	2.01E-4	1.66E-6	1.32E-5	2.56E-7	-8.44E-5	1.32E-4
AP	kg SO2-eq	6.81E-4	5.62E-5	1.30E-4	8.67E-4	1.19E-5	6.74E-5	5.88E-7	-3.07E-4	6.40E-4
EP	kg PO4 3--eq	6.23E-5	1.12E-5	1.67E-5	9.02E-5	2.38E-6	1.19E-5	2.55E-7	-2.82E-5	7.66E-5
HTP	kg 1,4-DB-eq	3.43E-2	5.59E-3	2.28E-2	6.27E-2	1.18E-3	2.72E-2	8.77E-5	-1.51E-2	7.60E-2
FAETP	kg 1,4-DB-eq	8.49E-4	1.64E-4	8.25E-4	1.84E-3	3.47E-5	6.28E-4	9.47E-5	-3.00E-4	2.30E-3
MAETP	kg 1,4-DB-eq	2.32E+0	5.85E-1	2.31E+0	5.21E+0	1.24E-1	1.39E+0	9.45E-2	-9.17E-1	5.90E+0
TETP	kg 1,4-DB-eq	1.42E-4	1.98E-5	1.20E-3	1.36E-3	4.19E-6	8.37E-5	1.44E-7	-6.06E-5	1.39E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.24E-1	1.32E-2	2.22E-2	2.59E-1	2.79E-3	8.99E-2	1.31E-3	-1.35E-1	2.18E-1
GWP-f	kg CO2 eq	2.23E-1	1.32E-2	1.79E-2	2.54E-1	2.79E-3	8.99E-2	1.31E-3	-1.35E-1	2.14E-1
GWP-b	kg CO2 eq	7.00E-4	8.00E-6	4.00E-3	4.70E-3	1.69E-6	-1.69E-6	1.14E-6	-2.04E-4	4.50E-3
GWP-luluc	kg CO2 eq	6.68E-5	4.66E-6	2.85E-4	3.56E-4	9.88E-7	1.57E-5	2.29E-8	-2.71E-5	3.46E-4
ODP	kg CFC11 eq	4.45E-9	3.04E-9	1.81E-8	2.56E-8	6.43E-10	2.06E-9	3.30E-11	-5.32E-9	2.30E-8
AP	mol H+ eq	8.18E-4	7.50E-5	1.64E-4	1.06E-3	1.59E-5	8.71E-5	7.90E-7	-3.69E-4	7.92E-4
EP-fw	kg P eq	3.51E-6	1.08E-7	5.96E-7	4.22E-6	2.30E-8	4.54E-7	1.04E-9	-1.46E-6	3.24E-6
EP-m	kg N eq	1.35E-4	2.68E-5	3.04E-5	1.92E-4	5.69E-6	2.55E-5	5.09E-7	-6.58E-5	1.58E-4
EP-T	mol N eq	1.54E-3	2.96E-4	3.77E-4	2.21E-3	6.27E-5	2.81E-4	3.20E-6	-7.28E-4	1.83E-3
POCP	kg NMVOC eq	6.96E-4	8.46E-5	8.72E-5	8.68E-4	1.79E-5	8.85E-5	1.20E-6	-3.34E-4	6.41E-4
ADP-mm	kg Sb eq	3.56E-6	3.41E-7	1.39E-6	5.29E-6	7.22E-8	3.42E-7	8.00E-10	-8.62E-7	4.84E-6
ADP-f	MJ	7.77E+0	2.02E-1	4.59E+0	1.26E+1	4.28E-2	2.74E-1	2.41E-3	-4.18E+0	8.70E+0
WDP	m3 depriv.	1.58E-1	6.20E-4	7.97E-2	2.38E-1	1.31E-4	5.36E-3	1.39E-5	-7.15E-2	1.72E-1
PM	disease inc.	7.10E-9	1.19E-9	1.35E-9	9.64E-9	2.52E-10	1.43E-9	1.66E-11	-3.08E-9	8.26E-9
IR	kBq U-235 eq	4.18E-3	8.84E-4	5.37E-2	5.88E-2	1.87E-4	8.26E-4	1.12E-5	-1.94E-3	5.79E-2
ETP-fw	CTUe	1.37E+0	1.64E-1	1.53E+0	3.06E+0	3.48E-2	3.10E-1	2.02E-3	-5.31E-1	2.88E+0
HTP-c	CTUh	5.42E-11	5.84E-12	3.30E-11	9.31E-11	1.24E-12	3.92E-11	6.02E-14	-2.21E-11	1.12E-10
HTP-nc	CTUh	1.50E-9	1.96E-10	1.05E-9	2.75E-9	4.15E-11	4.69E-10	1.31E-12	-6.22E-10	2.64E-9
SQP	Pt	3.30E-1	1.73E-1	1.26E+0	1.76E+0	3.66E-2	2.19E-1	6.18E-3	-1.57E-1	1.86E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.23E-1	2.90E-3	6.48E-1	7.74E-1	6.14E-4	1.35E-2	9.24E-5	-5.93E-2	7.29E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.23E-1	2.90E-3	6.48E-1	7.74E-1	6.14E-4	1.35E-2	9.24E-5	-5.93E-2	7.29E-1
PENRE	MJ	8.34E+0	2.15E-1	4.60E+0	1.32E+1	4.55E-2	2.92E-1	2.56E-3	-4.50E+0	8.99E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.34E+0	2.15E-1	4.60E+0	1.32E+1	4.55E-2	2.92E-1	2.56E-3	-4.50E+0	8.99E+0
PET	MJ	8.46E+0	2.18E-1	5.25E+0	1.39E+1	4.61E-2	3.05E-1	2.65E-3	-4.56E+0	9.72E+0
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	2.46E-3	2.29E-5	2.56E-3	5.04E-3	4.85E-6	1.59E-4	2.97E-6	-1.08E-3	4.14E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.03E-6	5.17E-7	8.60E-8	1.63E-6	1.10E-7	4.48E-7	2.92E-9	-1.04E-6	1.15E-6
NHWD	kg	9.57E-3	1.25E-2	2.46E-3	2.46E-2	2.65E-3	1.38E-2	1.06E-2	-3.20E-3	4.84E-2
RWD	kg	3.61E-6	1.38E-6	1.29E-7	5.11E-6	2.91E-7	1.05E-6	1.57E-8	-1.76E-6	4.71E-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



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