

Environmental Profile

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

Ecochain v3.5.80



Product: 3079566 - EK PP-RCT Flange Adaptor GY 90
 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 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	0.06	0.01	0.01	0.08	0	0.03	0	-0.03	0.07
ADPE	kg Sb-eq	1.11E-5	1.08E-6	4.43E-6	1.66E-5	2.28E-7	1.12E-6	2.52E-9	-2.85E-6	1.51E-5
ADPF	kg Sb-eq	1.23E-2	3.04E-4	3.36E-4	1.29E-2	6.42E-5	4.30E-4	3.52E-6	-6.61E-3	6.80E-3
GWP	kg CO2-eq	7.18E-1	4.15E-2	6.06E-2	8.20E-1	8.75E-3	3.08E-1	3.55E-3	-4.35E-1	7.05E-1
ODP	kg CFC-11-eq	1.69E-8	7.69E-9	1.03E-7	1.28E-7	1.62E-9	5.75E-9	8.41E-11	-1.85E-8	1.17E-7
POCP	kg ethene-eq	6.06E-4	2.49E-5	4.36E-5	6.75E-4	5.25E-6	4.35E-5	8.08E-7	-2.77E-4	4.47E-4
AP	kg SO2-eq	2.29E-3	1.78E-4	4.14E-4	2.89E-3	3.76E-5	2.22E-4	1.85E-6	-1.04E-3	2.11E-3
EP	kg PO4 3--eq	2.23E-4	3.56E-5	5.34E-5	3.12E-4	7.52E-6	3.96E-5	8.08E-7	-1.08E-4	2.51E-4
HTP	kg 1,4-DB-eq	1.19E-1	1.77E-2	7.35E-2	2.10E-1	3.74E-3	8.80E-2	2.78E-4	-5.34E-2	2.49E-1
FAETP	kg 1,4-DB-eq	3.31E-3	5.20E-4	2.65E-3	6.48E-3	1.10E-4	2.15E-3	3.01E-4	-1.44E-3	7.60E-3
MAETP	kg 1,4-DB-eq	8.07E+0	1.86E+0	7.36E+0	1.73E+1	3.91E-1	4.81E+0	3.00E-1	-3.25E+0	1.95E+1
TETP	kg 1,4-DB-eq	5.40E-4	6.29E-5	3.82E-3	4.42E-3	1.33E-5	2.67E-4	4.53E-7	-3.57E-4	4.34E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	7.50E-1	4.18E-2	7.17E-2	8.64E-1	8.83E-3	3.16E-1	4.16E-3	-4.34E-1	7.59E-1
GWP-f	kg CO2 eq	7.48E-1	4.18E-2	5.79E-2	8.48E-1	8.82E-3	3.09E-1	4.16E-3	-4.50E-1	7.20E-1
GWP-b	kg CO2 eq	1.76E-3	2.54E-5	1.29E-2	1.47E-2	5.35E-6	7.35E-3	3.61E-6	1.62E-2	3.83E-2
GWP-luluc	kg CO2 eq	3.23E-4	1.48E-5	9.04E-4	1.24E-3	3.12E-6	5.04E-5	7.16E-8	-2.04E-4	1.09E-3
ODP	kg CFC11 eq	1.64E-8	9.63E-9	5.75E-8	8.35E-8	2.03E-9	6.81E-9	1.04E-10	-1.96E-8	7.29E-8
AP	mol H+ eq	2.77E-3	2.38E-4	5.24E-4	3.53E-3	5.02E-5	2.87E-4	2.49E-6	-1.26E-3	2.61E-3
EP-fw	kg P eq	1.29E-5	3.44E-7	1.91E-6	1.52E-5	7.26E-8	1.46E-6	3.27E-9	-6.10E-6	1.06E-5
EP-m	kg N eq	4.76E-4	8.52E-5	9.73E-5	6.59E-4	1.80E-5	8.52E-5	1.61E-6	-2.30E-4	5.34E-4
EP-T	mol N eq	5.34E-3	9.39E-4	1.20E-3	7.48E-3	1.98E-4	9.38E-4	1.01E-5	-2.56E-3	6.07E-3
POCP	kg NMVOC eq	2.37E-3	2.68E-4	2.79E-4	2.92E-3	5.66E-5	2.95E-4	3.79E-6	-1.12E-3	2.15E-3
ADP-mm	kg Sb eq	1.11E-5	1.08E-6	4.43E-6	1.66E-5	2.28E-7	1.12E-6	2.52E-9	-2.85E-6	1.51E-5
ADP-f	MJ	2.57E+1	6.42E-1	1.46E+1	4.09E+1	1.35E-1	8.85E-1	7.62E-3	-1.36E+1	2.83E+1
WDP	m3 depriv.	5.24E-1	1.97E-3	2.55E-1	7.81E-1	4.15E-4	1.71E-2	4.16E-5	-2.51E-1	5.47E-1
PM	disease inc.	2.46E-8	3.77E-9	4.34E-9	3.27E-8	7.96E-10	4.67E-9	5.24E-11	-1.14E-8	2.68E-8
IR	kBq U-235 eq	1.46E-2	2.80E-3	1.70E-1	1.88E-1	5.92E-4	2.69E-3	3.53E-5	-7.26E-3	1.84E-1
ETP-fw	CTUe	6.64E+0	5.21E-1	4.88E+0	1.20E+1	1.10E-1	1.02E+0	6.38E-3	-2.97E+0	1.02E+1
HTP-c	CTUh	1.84E-10	1.85E-11	1.06E-10	3.09E-10	3.91E-12	1.28E-10	1.88E-13	-8.07E-11	3.60E-10
HTP-nc	CTUh	5.13E-9	6.21E-10	3.33E-9	9.08E-9	1.31E-10	1.53E-9	4.12E-12	-2.31E-9	8.43E-9
SQP	Pt	1.82E+0	5.49E-1	3.99E+0	6.35E+0	1.16E-1	7.04E-1	1.95E-2	-3.52E+0	3.67E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.57E-1	9.21E-3	2.06E+0	2.62E+0	1.94E-3	4.32E-2	2.93E-4	-7.36E-1	1.93E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.57E-1	9.21E-3	2.06E+0	2.62E+0	1.94E-3	4.32E-2	2.93E-4	-7.36E-1	1.93E+0
PENRE	MJ	2.75E+1	6.81E-1	1.46E+1	4.28E+1	1.44E-1	9.43E-1	8.08E-3	-1.47E+1	2.92E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.75E+1	6.81E-1	1.46E+1	4.28E+1	1.44E-1	9.43E-1	8.08E-3	-1.47E+1	2.92E+1
PET	MJ	2.81E+1	6.91E-1	1.67E+1	4.54E+1	1.46E-1	9.86E-1	8.38E-3	-1.54E+1	3.12E+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	8.40E-3	7.26E-5	8.17E-3	1.67E-2	1.53E-5	5.14E-4	9.38E-6	-4.05E-3	1.31E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.61E-6	1.64E-6	2.91E-7	5.54E-6	3.46E-7	1.47E-6	9.21E-9	-3.81E-6	3.56E-6
NHWD	kg	3.45E-2	3.98E-2	8.31E-3	8.26E-2	8.39E-3	4.55E-2	3.35E-2	-1.16E-2	1.58E-1
RWD	kg	1.27E-5	4.36E-6	4.36E-7	1.75E-5	9.21E-7	3.43E-6	4.97E-8	-6.66E-6	1.53E-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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