

Environmental Profile

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

Ecochain v3.5.80



Product: 2021889 - EK PP-RCT Flange Adaptor GY 125
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	0.08	0.01	0.02	0.11	0	0.03	0	-0.05	0.1
ADPE	kg Sb-eq	1.53E-5	1.35E-6	6.09E-6	2.27E-5	3.21E-7	1.57E-6	3.54E-9	-4.00E-6	2.06E-5
ADPF	kg Sb-eq	1.69E-2	3.82E-4	4.63E-4	1.77E-2	9.03E-5	6.03E-4	4.95E-6	-9.16E-3	9.27E-3
GWP	kg CO2-eq	9.84E-1	5.20E-2	8.36E-2	1.12E+0	1.23E-2	4.10E-1	4.99E-3	-5.98E-1	9.48E-1
ODP	kg CFC-11-eq	2.32E-8	9.64E-9	1.42E-7	1.75E-7	2.28E-9	8.05E-9	1.18E-10	-2.47E-8	1.60E-7
POCP	kg ethene-eq	8.24E-4	3.14E-5	6.01E-5	9.15E-4	7.38E-6	6.07E-5	1.14E-6	-3.87E-4	5.98E-4
AP	kg SO2-eq	3.13E-3	2.29E-4	5.70E-4	3.93E-3	5.29E-5	3.10E-4	2.61E-6	-1.46E-3	2.83E-3
EP	kg PO4 3--eq	3.04E-4	4.52E-5	7.35E-5	4.22E-4	1.06E-5	5.52E-5	1.14E-6	-1.52E-4	3.37E-4
HTP	kg 1,4-DB-eq	1.61E-1	2.23E-2	1.01E-1	2.84E-1	5.26E-3	1.23E-1	3.90E-4	-7.47E-2	3.38E-1
FAETP	kg 1,4-DB-eq	4.56E-3	6.51E-4	3.65E-3	8.86E-3	1.54E-4	2.89E-3	4.23E-4	-2.05E-3	1.03E-2
MAETP	kg 1,4-DB-eq	1.08E+1	2.33E+0	1.01E+1	2.33E+1	5.50E-1	6.53E+0	4.22E-1	-4.56E+0	2.63E+1
TETP	kg 1,4-DB-eq	7.32E-4	7.88E-5	5.25E-3	6.06E-3	1.86E-5	3.75E-4	6.37E-7	-5.13E-4	5.94E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.03E+0	5.25E-2	9.89E-2	1.18E+0	1.24E-2	4.23E-1	5.84E-3	-5.95E-1	1.03E+0
GWP-f	kg CO2 eq	1.03E+0	5.24E-2	7.98E-2	1.16E+0	1.24E-2	4.12E-1	5.84E-3	-6.19E-1	9.69E-1
GWP-b	kg CO2 eq	3.19E-3	3.16E-5	1.78E-2	2.11E-2	7.53E-6	1.10E-2	5.08E-6	2.42E-2	5.63E-2
GWP-luluc	kg CO2 eq	4.41E-4	1.86E-5	1.24E-3	1.70E-3	4.39E-6	7.07E-5	1.01E-7	-2.96E-4	1.48E-3
ODP	kg CFC11 eq	2.24E-8	1.21E-8	7.91E-8	1.14E-7	2.86E-9	9.53E-9	1.47E-10	-2.62E-8	1.00E-7
AP	mol H+ eq	3.78E-3	3.05E-4	7.21E-4	4.81E-3	7.06E-5	4.01E-4	3.50E-6	-1.76E-3	3.52E-3
EP-fw	kg P eq	1.74E-5	4.30E-7	2.63E-6	2.04E-5	1.02E-7	2.05E-6	4.60E-9	-8.67E-6	1.39E-5
EP-m	kg N eq	6.50E-4	1.08E-4	1.34E-4	8.92E-4	2.53E-5	1.18E-4	2.27E-6	-3.21E-4	7.17E-4
EP-T	mol N eq	7.29E-3	1.19E-3	1.65E-3	1.01E-2	2.78E-4	1.30E-3	1.42E-5	-3.57E-3	8.16E-3
POCP	kg NMVOC eq	3.23E-3	3.40E-4	3.84E-4	3.95E-3	7.96E-5	4.10E-4	5.33E-6	-1.57E-3	2.88E-3
ADP-mm	kg Sb eq	1.53E-5	1.35E-6	6.09E-6	2.27E-5	3.21E-7	1.57E-6	3.54E-9	-4.00E-6	2.06E-5
ADP-f	MJ	3.54E+1	8.04E-1	2.00E+1	5.62E+1	1.90E-1	1.24E+0	1.07E-2	-1.89E+1	3.87E+1
WDP	m3 depriv.	7.17E-1	2.46E-3	3.50E-1	1.07E+0	5.84E-4	2.40E-2	5.86E-5	-3.54E-1	7.41E-1
PM	disease inc.	3.37E-8	4.72E-9	5.97E-9	4.44E-8	1.12E-9	6.54E-9	7.36E-11	-1.61E-8	3.60E-8
IR	kBq U-235 eq	1.99E-2	3.51E-3	2.34E-1	2.58E-1	8.32E-4	3.78E-3	4.96E-5	-1.02E-2	2.52E-1
ETP-fw	CTUe	9.17E+0	6.52E-1	6.72E+0	1.65E+1	1.55E-1	1.43E+0	8.96E-3	-4.27E+0	1.39E+1
HTP-c	CTUh	2.52E-10	2.33E-11	1.46E-10	4.20E-10	5.50E-12	1.77E-10	2.65E-13	-1.13E-10	4.90E-10
HTP-nc	CTUh	7.00E-9	7.77E-10	4.59E-9	1.24E-8	1.84E-10	2.13E-9	5.79E-12	-3.27E-9	1.14E-8
SQP	Pt	2.49E+0	6.86E-1	5.49E+0	8.67E+0	1.63E-1	9.86E-1	2.75E-2	-5.21E+0	4.64E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.65E-1	1.15E-2	2.83E+0	3.61E+0	2.73E-3	6.06E-2	4.12E-4	-1.08E+0	2.59E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.65E-1	1.15E-2	2.83E+0	3.61E+0	2.73E-3	6.06E-2	4.12E-4	-1.08E+0	2.59E+0
PENRE	MJ	3.79E+1	8.54E-1	2.01E+1	5.89E+1	2.02E-1	1.32E+0	1.14E-2	-2.04E+1	4.00E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.79E+1	8.54E-1	2.01E+1	5.89E+1	2.02E-1	1.32E+0	1.14E-2	-2.04E+1	4.00E+1
PET	MJ	3.87E+1	8.65E-1	2.29E+1	6.25E+1	2.05E-1	1.38E+0	1.18E-2	-2.15E+1	4.26E+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	1.14E-2	9.08E-5	1.12E-2	2.27E-2	2.15E-5	7.17E-4	1.32E-5	-5.73E-3	1.77E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.96E-6	2.05E-6	4.04E-7	7.41E-6	4.87E-7	2.06E-6	1.29E-8	-5.09E-6	4.88E-6
NHWD	kg	4.66E-2	4.97E-2	1.15E-2	1.08E-1	1.18E-2	6.28E-2	4.72E-2	-1.62E-2	2.13E-1
RWD	kg	1.73E-5	5.47E-6	6.04E-7	2.34E-5	1.29E-6	4.81E-6	6.99E-8	-9.34E-6	2.02E-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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