

Environmental Profile

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

Ecochain v3.5.80



Product: 3083453 - EK PP-RCT Flange Adaptor GY 50
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	0.03	0	0.01	0	-0.01	0.02
ADPE	kg Sb-eq	3.64E-6	3.17E-7	1.29E-6	5.25E-6	6.67E-8	3.34E-7	7.41E-10	-8.46E-7	4.81E-6
ADPF	kg Sb-eq	3.80E-3	8.93E-5	9.98E-5	3.99E-3	1.88E-5	1.28E-4	1.03E-6	-2.02E-3	2.11E-3
GWP	kg CO2-eq	2.27E-1	1.22E-2	1.80E-2	2.57E-1	2.56E-3	1.04E-1	1.04E-3	-1.37E-1	2.28E-1
ODP	kg CFC-11-eq	5.72E-9	2.25E-9	3.01E-8	3.80E-8	4.75E-10	1.73E-9	2.46E-11	-6.26E-9	3.40E-8
POCP	kg ethene-eq	1.94E-4	7.30E-6	1.28E-5	2.14E-4	1.54E-6	1.31E-5	2.36E-7	-8.30E-5	1.46E-4
AP	kg SO2-eq	7.43E-4	5.23E-5	1.21E-4	9.16E-4	1.10E-5	6.69E-5	5.44E-7	-3.15E-4	6.80E-4
EP	kg PO4 3--eq	7.41E-5	1.04E-5	1.57E-5	1.00E-4	2.20E-6	1.21E-5	2.36E-7	-3.38E-5	8.10E-5
HTP	kg 1,4-DB-eq	3.97E-2	5.20E-3	2.17E-2	6.66E-2	1.09E-3	2.63E-2	8.10E-5	-1.65E-2	7.77E-2
FAETP	kg 1,4-DB-eq	1.16E-3	1.52E-4	7.83E-4	2.10E-3	3.21E-5	7.08E-4	8.74E-5	-4.62E-4	2.47E-3
MAETP	kg 1,4-DB-eq	2.80E+0	5.44E-1	2.16E+0	5.50E+0	1.15E-1	1.57E+0	8.72E-2	-9.95E-1	6.28E+0
TETP	kg 1,4-DB-eq	1.84E-4	1.84E-5	1.11E-3	1.31E-3	3.88E-6	7.89E-5	1.33E-7	-1.18E-4	1.28E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.37E-1	1.23E-2	2.13E-2	2.70E-1	2.58E-3	1.07E-1	1.22E-3	-1.35E-1	2.46E-1
GWP-f	kg CO2 eq	2.37E-1	1.23E-2	1.71E-2	2.66E-1	2.58E-3	1.04E-1	1.22E-3	-1.41E-1	2.33E-1
GWP-b	kg CO2 eq	1.17E-4	7.44E-6	3.85E-3	3.98E-3	1.57E-6	2.69E-3	1.05E-6	5.96E-3	1.26E-2
GWP-luluc	kg CO2 eq	1.16E-4	4.34E-6	2.63E-4	3.83E-4	9.13E-7	1.49E-5	2.12E-8	-6.86E-5	3.31E-4
ODP	kg CFC11 eq	5.61E-9	2.82E-9	1.68E-8	2.52E-8	5.94E-10	2.04E-9	3.05E-11	-6.70E-9	2.12E-8
AP	mol H+ eq	8.98E-4	6.98E-5	1.53E-4	1.12E-3	1.47E-5	8.68E-5	7.30E-7	-3.81E-4	8.42E-4
EP-fw	kg P eq	4.43E-6	1.01E-7	5.60E-7	5.09E-6	2.12E-8	4.32E-7	9.65E-10	-1.91E-6	3.63E-6
EP-m	kg N eq	1.56E-4	2.50E-5	2.86E-5	2.09E-4	5.26E-6	2.61E-5	4.70E-7	-7.08E-5	1.70E-4
EP-T	mol N eq	1.75E-3	2.75E-4	3.52E-4	2.37E-3	5.79E-5	2.87E-4	2.96E-6	-7.87E-4	1.93E-3
POCP	kg NMVOC eq	7.63E-4	7.87E-5	8.20E-5	9.24E-4	1.66E-5	8.98E-5	1.11E-6	-3.41E-4	6.90E-4
ADP-mm	kg Sb eq	3.64E-6	3.17E-7	1.29E-6	5.25E-6	6.67E-8	3.34E-7	7.41E-10	-8.46E-7	4.81E-6
ADP-f	MJ	7.92E+0	1.88E-1	4.24E+0	1.23E+1	3.96E-2	2.63E-1	2.23E-3	-4.15E+0	8.51E+0
WDP	m3 depriv.	1.66E-1	5.77E-4	7.47E-2	2.42E-1	1.22E-4	5.06E-3	1.31E-5	-7.60E-2	1.71E-1
PM	disease inc.	7.95E-9	1.11E-9	1.28E-9	1.03E-8	2.33E-10	1.40E-9	1.53E-11	-3.47E-9	8.51E-9
IR	kBq U-235 eq	4.80E-3	8.22E-4	4.96E-2	5.53E-2	1.73E-4	8.03E-4	1.03E-5	-2.25E-3	5.40E-2
ETP-fw	CTUe	2.36E+0	1.53E-1	1.43E+0	3.94E+0	3.22E-2	3.06E-1	1.87E-3	-9.76E-1	3.30E+0
HTP-c	CTUh	6.08E-11	5.44E-12	3.11E-11	9.74E-11	1.14E-12	3.98E-11	5.59E-14	-2.50E-11	1.13E-10
HTP-nc	CTUh	1.68E-9	1.82E-10	9.76E-10	2.84E-9	3.83E-11	4.67E-10	1.21E-12	-7.11E-10	2.64E-9
SQP	Pt	6.57E-1	1.61E-1	1.16E+0	1.98E+0	3.39E-2	2.09E-1	5.72E-3	-1.26E+0	9.74E-1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.92E-1	2.70E-3	5.99E-1	7.94E-1	5.68E-4	1.28E-2	8.53E-5	-2.56E-1	5.52E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.92E-1	2.70E-3	5.99E-1	7.94E-1	5.68E-4	1.28E-2	8.53E-5	-2.56E-1	5.52E-1
PENRE	MJ	8.50E+0	2.00E-1	4.26E+0	1.30E+1	4.20E-2	2.80E-1	2.37E-3	-4.48E+0	8.80E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.50E+0	2.00E-1	4.26E+0	1.30E+1	4.20E-2	2.80E-1	2.37E-3	-4.48E+0	8.80E+0
PET	MJ	8.69E+0	2.02E-1	4.86E+0	1.37E+1	4.26E-2	2.93E-1	2.45E-3	-4.73E+0	9.35E+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	2.78E-3	2.13E-5	2.39E-3	5.19E-3	4.48E-6	1.54E-4	2.74E-6	-1.25E-3	4.11E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.20E-6	4.81E-7	9.03E-8	1.77E-6	1.01E-7	4.42E-7	2.70E-9	-1.30E-6	1.02E-6
NHWD	kg	1.19E-2	1.17E-2	2.57E-3	2.61E-2	2.45E-3	1.41E-2	9.81E-3	-3.54E-3	4.89E-2
RWD	kg	4.17E-6	1.28E-6	1.35E-7	5.58E-6	2.69E-7	1.02E-6	1.45E-8	-2.08E-6	4.81E-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