

Environmental Profile

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

Ecochain v3.5.80



Product: 3079564 - EK PP-RCT Flange Adaptor 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	0.04	0	0.01	0.05	0	0.02	0	-0.02	0.05
ADPE	kg Sb-eq	7.50E-6	7.11E-7	2.80E-6	1.10E-5	1.44E-7	7.29E-7	1.59E-9	-1.85E-6	1.00E-5
ADPF	kg Sb-eq	8.17E-3	2.00E-4	2.16E-4	8.59E-3	4.04E-5	2.77E-4	2.22E-6	-4.34E-3	4.56E-3
GWP	kg CO2-eq	4.89E-1	2.73E-2	3.90E-2	5.55E-1	5.51E-3	2.20E-1	2.23E-3	-2.94E-1	4.88E-1
ODP	kg CFC-11-eq	1.24E-8	5.06E-9	6.51E-8	8.26E-8	1.02E-9	3.77E-9	5.30E-11	-1.36E-8	7.38E-8
POCP	kg ethene-eq	4.16E-4	1.64E-5	2.78E-5	4.60E-4	3.31E-6	2.85E-5	5.09E-7	-1.80E-4	3.12E-4
AP	kg SO2-eq	1.59E-3	1.17E-4	2.63E-4	1.97E-3	2.37E-5	1.45E-4	1.17E-6	-6.95E-4	1.44E-3
EP	kg PO4 3--eq	1.61E-4	2.34E-5	3.40E-5	2.18E-4	4.74E-6	2.62E-5	5.08E-7	-7.78E-5	1.72E-4
HTP	kg 1,4-DB-eq	8.49E-2	1.17E-2	4.71E-2	1.44E-1	2.36E-3	5.69E-2	1.75E-4	-3.67E-2	1.66E-1
FAETP	kg 1,4-DB-eq	2.58E-3	3.42E-4	1.70E-3	4.61E-3	6.90E-5	1.51E-3	1.89E-4	-1.14E-3	5.24E-3
MAETP	kg 1,4-DB-eq	5.92E+0	1.22E+0	4.68E+0	1.18E+1	2.47E-1	3.38E+0	1.89E-1	-2.23E+0	1.34E+1
TETP	kg 1,4-DB-eq	4.05E-4	4.13E-5	2.41E-3	2.86E-3	8.35E-6	1.70E-4	2.86E-7	-3.02E-4	2.73E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.09E-1	2.75E-2	4.61E-2	5.83E-1	5.56E-3	2.28E-1	2.62E-3	-2.86E-1	5.33E-1
GWP-f	kg CO2 eq	5.09E-1	2.75E-2	3.72E-2	5.73E-1	5.55E-3	2.20E-1	2.62E-3	-3.04E-1	4.98E-1
GWP-b	kg CO2 eq	4.65E-4	1.67E-5	8.36E-3	8.84E-3	3.37E-6	7.99E-3	2.27E-6	1.79E-2	3.47E-2
GWP-luluc	kg CO2 eq	2.71E-4	9.73E-6	5.70E-4	8.51E-4	1.97E-6	3.21E-5	4.53E-8	-1.83E-4	7.02E-4
ODP	kg CFC11 eq	1.22E-8	6.34E-9	3.64E-8	5.49E-8	1.28E-9	4.46E-9	6.57E-11	-1.45E-8	4.62E-8
AP	mol H+ eq	1.92E-3	1.57E-4	3.32E-4	2.41E-3	3.16E-5	1.89E-4	1.57E-6	-8.42E-4	1.79E-3
EP-fw	kg P eq	9.61E-6	2.26E-7	1.21E-6	1.10E-5	4.57E-8	9.34E-7	2.07E-9	-4.54E-6	7.49E-6
EP-m	kg N eq	3.38E-4	5.61E-5	6.20E-5	4.56E-4	1.13E-5	5.68E-5	1.01E-6	-1.57E-4	3.68E-4
EP-T	mol N eq	3.77E-3	6.18E-4	7.63E-4	5.15E-3	1.25E-4	6.25E-4	6.37E-6	-1.75E-3	4.15E-3
POCP	kg NMVOC eq	1.64E-3	1.77E-4	1.78E-4	1.99E-3	3.57E-5	1.95E-4	2.39E-6	-7.47E-4	1.48E-3
ADP-mm	kg Sb eq	7.49E-6	7.11E-7	2.80E-6	1.10E-5	1.44E-7	7.29E-7	1.59E-9	-1.85E-6	1.00E-5
ADP-f	MJ	1.70E+1	4.22E-1	9.19E+0	2.67E+1	8.53E-2	5.70E-1	4.80E-3	-8.93E+0	1.84E+1
WDP	m3 depriv.	3.55E-1	1.30E-3	1.62E-1	5.18E-1	2.62E-4	1.09E-2	2.68E-5	-1.71E-1	3.59E-1
PM	disease inc.	1.72E-8	2.48E-9	2.77E-9	2.25E-8	5.01E-10	3.04E-9	3.30E-11	-7.94E-9	1.81E-8
IR	kBq U-235 eq	1.04E-2	1.85E-3	1.07E-1	1.20E-1	3.73E-4	1.75E-3	2.22E-5	-5.14E-3	1.17E-1
ETP-fw	CTUe	5.56E+0	3.43E-1	3.09E+0	8.99E+0	6.92E-2	6.66E-1	4.02E-3	-2.48E+0	7.25E+0
HTP-c	CTUh	1.30E-10	1.22E-11	6.74E-11	2.09E-10	2.46E-12	8.51E-11	1.19E-13	-5.65E-11	2.41E-10
HTP-nc	CTUh	3.60E-9	4.09E-10	2.11E-9	6.12E-9	8.25E-11	1.01E-9	2.60E-12	-1.63E-9	5.58E-9
SQP	Pt	1.58E+0	3.61E-1	2.52E+0	4.46E+0	7.29E-2	4.51E-1	1.23E-2	-3.60E+0	1.39E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.49E-1	6.06E-3	1.30E+0	1.75E+0	1.22E-3	2.76E-2	1.84E-4	-7.14E-1	1.07E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.49E-1	6.06E-3	1.30E+0	1.75E+0	1.22E-3	2.76E-2	1.84E-4	-7.14E-1	1.07E+0
PENRE	MJ	1.83E+1	4.48E-1	9.22E+0	2.80E+1	9.05E-2	6.07E-1	5.09E-3	-9.64E+0	1.90E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.83E+1	4.48E-1	9.22E+0	2.80E+1	9.05E-2	6.07E-1	5.09E-3	-9.64E+0	1.90E+1
PET	MJ	1.87E+1	4.54E-1	1.05E+1	2.97E+1	9.17E-2	6.34E-1	5.28E-3	-1.04E+1	2.01E+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	5.92E-3	4.78E-5	5.18E-3	1.12E-2	9.65E-6	3.32E-4	5.91E-6	-2.87E-3	8.63E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.59E-6	1.08E-6	1.97E-7	3.87E-6	2.18E-7	9.60E-7	5.81E-9	-2.81E-6	2.24E-6
NHWD	kg	2.56E-2	2.62E-2	5.61E-3	5.73E-2	5.28E-3	3.02E-2	2.11E-2	-8.00E-3	1.06E-1
RWD	kg	9.03E-6	2.87E-6	2.95E-7	1.22E-5	5.80E-7	2.23E-6	3.13E-8	-4.76E-6	1.03E-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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