

Environmental Profile

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

Ecochain v3.5.80



Product: 3079568 - EK PP-RCT Flange Adaptor GY 110
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

This document and supporting material contain confidential and proprietary business information of Wavin - CZ - Kostelec - Verified. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - CZ - Kostelec - Verified.

Results

Environmental impact SBK set 1	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
ECI	euro	0.1	0.01	0.02	0.14	0	0.04	0	-0.06	0.13
ADPE	kg Sb-eq	1.93E-5	1.88E-6	7.89E-6	2.90E-5	4.05E-7	1.93E-6	4.48E-9	-4.85E-6	2.65E-5
ADPF	kg Sb-eq	2.13E-2	5.30E-4	5.89E-4	2.24E-2	1.14E-4	7.49E-4	6.25E-6	-1.15E-2	1.18E-2
GWP	kg CO2-eq	1.23E+0	7.21E-2	1.06E-1	1.40E+0	1.55E-2	5.24E-1	6.30E-3	-7.44E-1	1.21E+0
ODP	kg CFC-11-eq	2.63E-8	1.34E-8	1.84E-7	2.23E-7	2.88E-9	9.83E-9	1.49E-10	-2.95E-8	2.07E-7
POCP	kg ethene-eq	1.04E-3	4.33E-5	7.70E-5	1.16E-3	9.32E-6	7.46E-5	1.43E-6	-4.77E-4	7.69E-4
AP	kg SO2-eq	3.89E-3	3.10E-4	7.36E-4	4.94E-3	6.69E-5	3.81E-4	3.29E-6	-1.73E-3	3.66E-3
EP	kg PO4 3--eq	3.56E-4	6.20E-5	9.44E-5	5.12E-4	1.34E-5	6.76E-5	1.43E-6	-1.60E-4	4.35E-4
HTP	kg 1,4-DB-eq	1.97E-1	3.09E-2	1.29E-1	3.57E-1	6.65E-3	1.53E-1	4.93E-4	-8.58E-2	4.32E-1
FAETP	kg 1,4-DB-eq	4.69E-3	9.04E-4	4.67E-3	1.03E-2	1.95E-4	3.66E-3	5.34E-4	-1.70E-3	1.30E-2
MAETP	kg 1,4-DB-eq	1.32E+1	3.23E+0	1.30E+1	2.95E+1	6.95E-1	8.05E+0	5.33E-1	-5.19E+0	3.36E+1
TETP	kg 1,4-DB-eq	8.19E-4	1.09E-4	6.80E-3	7.73E-3	2.35E-5	4.70E-4	8.05E-7	-3.45E-4	7.88E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.28E+0	7.28E-2	1.26E-1	1.48E+0	1.57E-2	5.27E-1	7.38E-3	-7.72E-1	1.26E+0
GWP-f	kg CO2 eq	1.28E+0	7.27E-2	1.02E-1	1.45E+0	1.57E-2	5.27E-1	7.38E-3	-7.71E-1	1.23E+0
GWP-b	kg CO2 eq	3.28E-3	4.42E-5	2.26E-2	2.60E-2	9.51E-6	6.11E-5	6.42E-6	-9.95E-4	2.51E-2
GWP-luluc	kg CO2 eq	3.91E-4	2.57E-5	1.61E-3	2.03E-3	5.54E-6	8.85E-5	1.27E-7	-1.54E-4	1.97E-3
ODP	kg CFC11 eq	2.50E-8	1.68E-8	1.02E-7	1.44E-7	3.61E-9	1.16E-8	1.85E-10	-3.14E-8	1.28E-7
AP	mol H+ eq	4.68E-3	4.14E-4	9.30E-4	6.02E-3	8.92E-5	4.93E-4	4.43E-6	-2.09E-3	4.52E-3
EP-fw	kg P eq	2.04E-5	5.98E-7	3.38E-6	2.44E-5	1.29E-7	2.56E-6	5.82E-9	-8.24E-6	1.88E-5
EP-m	kg N eq	7.78E-4	1.48E-4	1.72E-4	1.10E-3	3.19E-5	1.45E-4	2.86E-6	-3.73E-4	9.04E-4
EP-T	mol N eq	8.81E-3	1.63E-3	2.13E-3	1.26E-2	3.52E-4	1.59E-3	1.80E-5	-4.13E-3	1.04E-2
POCP	kg NMVOC eq	4.01E-3	4.67E-4	4.94E-4	4.97E-3	1.01E-4	5.02E-4	6.74E-6	-1.89E-3	3.69E-3
ADP-mm	kg Sb eq	1.93E-5	1.88E-6	7.89E-6	2.90E-5	4.05E-7	1.93E-6	4.48E-9	-4.85E-6	2.65E-5
ADP-f	MJ	4.45E+1	1.12E+0	2.59E+1	7.16E+1	2.40E-1	1.54E+0	1.35E-2	-2.37E+1	4.97E+1
WDP	m3 depriv.	9.04E-1	3.43E-3	4.51E-1	1.36E+0	7.38E-4	3.02E-2	7.44E-5	-4.03E-1	9.87E-1
PM	disease inc.	4.06E-8	6.57E-9	7.65E-9	5.48E-8	1.41E-9	8.05E-9	9.30E-11	-1.74E-8	4.70E-8
IR	kBq U-235 eq	2.41E-2	4.88E-3	3.04E-1	3.33E-1	1.05E-3	4.65E-3	6.26E-5	-1.10E-2	3.28E-1
ETP-fw	CTUe	7.84E+0	9.07E-1	8.68E+0	1.74E+1	1.95E-1	1.75E+0	1.13E-2	-3.01E+0	1.64E+1
HTP-c	CTUh	3.07E-10	3.23E-11	1.87E-10	5.26E-10	6.95E-12	2.21E-10	3.35E-13	-1.25E-10	6.29E-10
HTP-nc	CTUh	8.52E-9	1.08E-9	5.92E-9	1.55E-8	2.33E-10	2.65E-9	7.32E-12	-3.51E-9	1.49E-8
SQP	Pt	1.94E+0	9.55E-1	7.11E+0	1.00E+1	2.06E-1	1.23E+0	3.47E-2	-9.18E-1	1.06E+1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.17E-1	1.60E-2	3.67E+0	4.40E+0	3.45E-3	7.58E-2	5.21E-4	-3.39E-1	4.14E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.17E-1	1.60E-2	3.67E+0	4.40E+0	3.45E-3	7.58E-2	5.21E-4	-3.39E-1	4.14E+0
PENRE	MJ	4.78E+1	1.19E+0	2.60E+1	7.50E+1	2.55E-1	1.64E+0	1.44E-2	-2.56E+1	5.13E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.78E+1	1.19E+0	2.60E+1	7.50E+1	2.55E-1	1.64E+0	1.44E-2	-2.56E+1	5.13E+1
PET	MJ	4.85E+1	1.20E+0	2.97E+1	7.94E+1	2.59E-1	1.72E+0	1.49E-2	-2.59E+1	5.55E+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	1.42E-2	1.26E-4	1.45E-2	2.88E-2	2.72E-5	8.97E-4	1.67E-5	-6.07E-3	2.37E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.77E-6	2.86E-6	4.89E-7	9.12E-6	6.15E-7	2.53E-6	1.64E-8	-6.15E-6	6.12E-6
NHWD	kg	5.47E-2	6.92E-2	1.40E-2	1.38E-1	1.49E-2	7.86E-2	5.96E-2	-1.81E-2	2.73E-1
RWD	kg	2.07E-5	7.59E-6	7.32E-7	2.91E-5	1.63E-6	5.90E-6	8.83E-8	-9.99E-6	2.67E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777