

Environmental Profile

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

Ecochain v3.5.80



Product: 3082227 - EK PP-RCT Flange Adaptor GN 63
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	0.03	0	0.01	0.04	0	0.01	0	-0.01	0.03
ADPE	kg Sb-eq	5.14E-6	4.68E-7	1.94E-6	7.55E-6	1.00E-7	4.94E-7	1.11E-9	-1.25E-6	6.89E-6
ADPF	kg Sb-eq	5.42E-3	1.32E-4	1.48E-4	5.70E-3	2.82E-5	1.89E-4	1.54E-6	-2.92E-3	3.00E-3
GWP	kg CO2-eq	3.20E-1	1.80E-2	2.67E-2	3.64E-1	3.84E-3	1.38E-1	1.56E-3	-1.93E-1	3.15E-1
ODP	kg CFC-11-eq	7.78E-9	3.33E-9	4.52E-8	5.63E-8	7.12E-10	2.54E-9	3.69E-11	-8.33E-9	5.13E-8
POCP	kg ethene-eq	2.70E-4	1.08E-5	1.92E-5	3.00E-4	2.30E-6	1.92E-5	3.55E-7	-1.22E-4	2.00E-4
AP	kg SO2-eq	1.03E-3	7.73E-5	1.82E-4	1.29E-3	1.65E-5	9.80E-5	8.15E-7	-4.61E-4	9.44E-4
EP	kg PO4 3--eq	1.01E-4	1.54E-5	2.34E-5	1.40E-4	3.30E-6	1.75E-5	3.54E-7	-4.84E-5	1.13E-4
HTP	kg 1,4-DB-eq	5.39E-2	7.68E-3	3.23E-2	9.39E-2	1.64E-3	3.88E-2	1.22E-4	-2.37E-2	1.11E-1
FAETP	kg 1,4-DB-eq	1.56E-3	2.25E-4	1.17E-3	2.95E-3	4.81E-5	9.62E-4	1.31E-4	-6.51E-4	3.44E-3
MAETP	kg 1,4-DB-eq	3.72E+0	8.04E-1	3.23E+0	7.76E+0	1.72E-1	2.16E+0	1.31E-1	-1.44E+0	8.77E+0
TETP	kg 1,4-DB-eq	2.46E-4	2.72E-5	1.67E-3	1.95E-3	5.82E-6	1.17E-4	2.00E-7	-1.63E-4	1.91E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.34E-1	1.81E-2	3.16E-2	3.84E-1	3.87E-3	1.43E-1	1.82E-3	-1.92E-1	3.40E-1
GWP-f	kg CO2 eq	3.33E-1	1.81E-2	2.55E-2	3.77E-1	3.87E-3	1.39E-1	1.82E-3	-2.00E-1	3.21E-1
GWP-b	kg CO2 eq	6.78E-4	1.10E-5	5.70E-3	6.39E-3	2.35E-6	3.51E-3	1.58E-6	7.76E-3	1.77E-2
GWP-luluc	kg CO2 eq	1.50E-4	6.41E-6	3.96E-4	5.53E-4	1.37E-6	2.21E-5	3.17E-8	-9.40E-5	4.82E-4
ODP	kg CFC11 eq	7.57E-9	4.17E-9	2.52E-8	3.70E-8	8.92E-10	3.00E-9	4.58E-11	-8.85E-9	3.21E-8
AP	mol H+ eq	1.25E-3	1.03E-4	2.30E-4	1.58E-3	2.20E-5	1.27E-4	1.09E-6	-5.57E-4	1.17E-3
EP-fw	kg P eq	5.89E-6	1.49E-7	8.38E-7	6.87E-6	3.18E-8	6.42E-7	1.44E-9	-2.74E-6	4.81E-6
EP-m	kg N eq	2.14E-4	3.69E-5	4.27E-5	2.94E-4	7.89E-6	3.77E-5	7.06E-7	-1.02E-4	2.38E-4
EP-T	mol N eq	2.41E-3	4.07E-4	5.28E-4	3.34E-3	8.69E-5	4.15E-4	4.44E-6	-1.14E-3	2.71E-3
POCP	kg NMVOC eq	1.06E-3	1.16E-4	1.23E-4	1.30E-3	2.48E-5	1.30E-4	1.67E-6	-4.97E-4	9.57E-4
ADP-mm	kg Sb eq	5.14E-6	4.68E-7	1.94E-6	7.55E-6	1.00E-7	4.94E-7	1.11E-9	-1.25E-6	6.89E-6
ADP-f	MJ	1.13E+1	2.78E-1	6.38E+0	1.80E+1	5.94E-2	3.90E-1	3.34E-3	-6.02E+0	1.24E+1
WDP	m3 depriv.	2.34E-1	8.53E-4	1.12E-1	3.46E-1	1.82E-4	7.53E-3	1.91E-5	-1.11E-1	2.43E-1
PM	disease inc.	1.10E-8	1.63E-9	1.91E-9	1.46E-8	3.49E-10	2.06E-9	2.30E-11	-5.06E-9	1.20E-8
IR	kBq U-235 eq	6.58E-3	1.21E-3	7.47E-2	8.25E-2	2.60E-4	1.19E-3	1.55E-5	-3.24E-3	8.07E-2
ETP-fw	CTUe	3.10E+0	2.26E-1	2.14E+0	5.47E+0	4.82E-2	4.50E-1	2.80E-3	-1.36E+0	4.61E+0
HTP-c	CTUh	8.38E-11	8.03E-12	4.65E-11	1.38E-10	1.72E-12	5.71E-11	8.34E-14	-3.59E-11	1.61E-10
HTP-nc	CTUh	2.32E-9	2.69E-10	1.46E-9	4.06E-9	5.75E-11	6.78E-10	1.81E-12	-1.03E-9	3.76E-9
SQP	Pt	8.48E-1	2.38E-1	1.75E+0	2.83E+0	5.08E-2	3.10E-1	8.57E-3	-1.67E+0	1.54E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.55E-1	3.99E-3	9.02E-1	1.16E+0	8.52E-4	1.90E-2	1.28E-4	-3.45E-1	8.36E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.55E-1	3.99E-3	9.02E-1	1.16E+0	8.52E-4	1.90E-2	1.28E-4	-3.45E-1	8.36E-1
PENRE	MJ	1.22E+1	2.95E-1	6.40E+0	1.89E+1	6.31E-2	4.15E-1	3.55E-3	-6.49E+0	1.28E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.22E+1	2.95E-1	6.40E+0	1.89E+1	6.31E-2	4.15E-1	3.55E-3	-6.49E+0	1.28E+1
PET	MJ	1.24E+1	2.99E-1	7.31E+0	2.00E+1	6.39E-2	4.34E-1	3.68E-3	-6.84E+0	1.37E+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	3.79E-3	3.15E-5	3.59E-3	7.40E-3	6.72E-6	2.26E-4	4.11E-6	-1.81E-3	5.84E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.65E-6	7.11E-7	1.29E-7	2.50E-6	1.52E-7	6.49E-7	4.05E-9	-1.72E-6	1.58E-6
NHWD	kg	1.59E-2	1.72E-2	3.69E-3	3.68E-2	3.68E-3	2.02E-2	1.47E-2	-5.14E-3	7.02E-2
RWD	kg	5.73E-6	1.89E-6	1.94E-7	7.81E-6	4.04E-7	1.51E-6	2.18E-8	-2.98E-6	6.77E-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



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