

Environmental Profile

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

Ecochain v3.5.80



Product: 3079575 - EK PP-RCT Reducer I/E GY 75x40
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	0.03
ADPE	kg Sb-eq	3.78E-6	3.31E-7	1.25E-6	5.36E-6	6.47E-8	3.19E-7	7.18E-10	-7.92E-7	4.96E-6
ADPF	kg Sb-eq	4.08E-3	9.31E-5	9.80E-5	4.27E-3	1.82E-5	1.24E-4	9.99E-7	-2.10E-3	2.31E-3
GWP	kg CO2-eq	2.47E-1	1.27E-2	1.77E-2	2.77E-1	2.48E-3	1.27E-1	1.01E-3	-1.46E-1	2.61E-1
ODP	kg CFC-11-eq	5.86E-9	2.35E-9	2.91E-8	3.74E-8	4.60E-10	1.67E-9	2.39E-11	-7.19E-9	3.23E-8
POCP	kg ethene-eq	2.20E-4	7.61E-6	1.25E-5	2.40E-4	1.49E-6	1.28E-5	2.29E-7	-8.12E-5	1.73E-4
AP	kg SO2-eq	8.19E-4	5.45E-5	1.18E-4	9.92E-4	1.07E-5	6.59E-5	5.27E-7	-2.95E-4	7.74E-4
EP	kg PO4 3--eq	7.88E-5	1.09E-5	1.53E-5	1.05E-4	2.13E-6	1.20E-5	2.28E-7	-2.83E-5	9.11E-5
HTP	kg 1,4-DB-eq	4.47E-2	5.42E-3	2.13E-2	7.14E-2	1.06E-3	2.61E-2	7.85E-5	-1.53E-2	8.34E-2
FAETP	kg 1,4-DB-eq	1.10E-3	1.59E-4	7.66E-4	2.03E-3	3.11E-5	8.32E-4	8.46E-5	-2.92E-4	2.68E-3
MAETP	kg 1,4-DB-eq	3.22E+0	5.67E-1	2.10E+0	5.89E+0	1.11E-1	1.76E+0	8.45E-2	-9.00E-1	6.94E+0
TETP	kg 1,4-DB-eq	1.93E-4	1.92E-5	1.08E-3	1.29E-3	3.76E-6	7.69E-5	1.29E-7	-6.11E-5	1.31E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.56E-1	1.28E-2	2.09E-2	2.90E-1	2.50E-3	1.28E-1	1.18E-3	-1.51E-1	2.70E-1
GWP-f	kg CO2 eq	2.57E-1	1.28E-2	1.68E-2	2.87E-1	2.50E-3	1.28E-1	1.18E-3	-1.51E-1	2.67E-1
GWP-b	kg CO2 eq	-7.88E-4	7.76E-6	3.79E-3	3.01E-3	1.52E-6	3.84E-5	1.02E-6	-1.11E-4	2.94E-3
GWP-luluc	kg CO2 eq	1.05E-4	4.52E-6	2.55E-4	3.65E-4	8.85E-7	1.45E-5	2.06E-8	-2.64E-5	3.53E-4
ODP	kg CFC11 eq	5.70E-9	2.94E-9	1.63E-8	2.49E-8	5.76E-10	1.97E-9	2.96E-11	-7.82E-9	1.97E-8
AP	mol H+ eq	9.86E-4	7.28E-5	1.49E-4	1.21E-3	1.42E-5	8.57E-5	7.08E-7	-3.57E-4	9.52E-4
EP-fw	kg P eq	4.97E-6	1.05E-7	5.46E-7	5.62E-6	2.06E-8	4.19E-7	9.37E-10	-1.38E-6	4.68E-6
EP-m	kg N eq	1.67E-4	2.60E-5	2.79E-5	2.21E-4	5.10E-6	2.61E-5	4.56E-7	-6.67E-5	1.86E-4
EP-T	mol N eq	1.89E-3	2.87E-4	3.43E-4	2.52E-3	5.62E-5	2.88E-4	2.87E-6	-7.37E-4	2.13E-3
POCP	kg NMVOC eq	8.49E-4	8.20E-5	7.99E-5	1.01E-3	1.61E-5	8.93E-5	1.08E-6	-3.30E-4	7.88E-4
ADP-mm	kg Sb eq	3.78E-6	3.31E-7	1.25E-6	5.36E-6	6.47E-8	3.19E-7	7.18E-10	-7.92E-7	4.96E-6
ADP-f	MJ	8.47E+0	1.96E-1	4.12E+0	1.28E+1	3.84E-2	2.55E-1	2.16E-3	-4.27E+0	8.80E+0
WDP	m3 depriv.	1.83E-1	6.02E-4	7.28E-2	2.57E-1	1.18E-4	4.96E-3	1.28E-5	-6.67E-2	1.95E-1
PM	disease inc.	8.45E-9	1.15E-9	1.25E-9	1.09E-8	2.26E-10	1.36E-9	1.49E-11	-2.87E-9	9.59E-9
IR	kBq U-235 eq	5.28E-3	8.57E-4	4.81E-2	5.43E-2	1.68E-4	7.75E-4	9.99E-6	-1.92E-3	5.33E-2
ETP-fw	CTUe	1.99E+0	1.59E-1	1.38E+0	3.53E+0	3.12E-2	2.96E-1	1.81E-3	-5.27E-1	3.33E+0
HTP-c	CTUh	6.59E-11	5.67E-12	3.03E-11	1.02E-10	1.11E-12	4.13E-11	5.42E-14	-2.21E-11	1.22E-10
HTP-nc	CTUh	1.82E-9	1.90E-10	9.48E-10	2.95E-9	3.72E-11	4.73E-10	1.17E-12	-5.94E-10	2.87E-9
SQP	Pt	5.37E-1	1.68E-1	1.13E+0	1.83E+0	3.28E-2	2.04E-1	5.54E-3	-1.72E-1	1.90E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.73E-1	2.81E-3	5.81E-1	7.57E-1	5.51E-4	1.24E-2	8.27E-5	-5.82E-2	7.12E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.73E-1	2.81E-3	5.81E-1	7.57E-1	5.51E-4	1.24E-2	8.27E-5	-5.82E-2	7.12E-1
PENRE	MJ	9.08E+0	2.08E-1	4.13E+0	1.34E+1	4.08E-2	2.72E-1	2.29E-3	-4.62E+0	9.12E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.08E+0	2.08E-1	4.13E+0	1.34E+1	4.08E-2	2.72E-1	2.29E-3	-4.62E+0	9.12E+0
PET	MJ	9.26E+0	2.11E-1	4.71E+0	1.42E+1	4.13E-2	2.84E-1	2.38E-3	-4.68E+0	9.83E+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	3.18E-3	2.22E-5	2.33E-3	5.53E-3	4.34E-6	1.53E-4	2.66E-6	-1.01E-3	4.67E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.22E-6	5.02E-7	9.13E-8	1.81E-6	9.82E-8	4.29E-7	2.62E-9	-1.52E-6	8.20E-7
NHWD	kg	1.30E-2	1.22E-2	2.60E-3	2.78E-2	2.38E-3	1.48E-2	9.51E-3	-3.10E-3	5.14E-2
RWD	kg	4.49E-6	1.33E-6	1.37E-7	5.96E-6	2.61E-7	9.86E-7	1.41E-8	-1.80E-6	5.42E-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



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