

Environmental Profile

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

Ecochain v3.5.80



Product: 3079556 - EK PP-RCT Weld-in saddle Plast GY 110x40
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	0.01	0	0	0.01	0	0	0	-0	0.01
ADPE	kg Sb-eq	1.43E-6	1.50E-7	5.07E-7	2.08E-6	2.79E-8	1.44E-7	3.09E-10	-3.70E-7	1.89E-6
ADPF	kg Sb-eq	1.55E-3	4.23E-5	4.02E-5	1.63E-3	7.86E-6	5.42E-5	4.31E-7	-8.32E-4	8.62E-4
GWP	kg CO2-eq	9.29E-2	5.76E-3	7.24E-3	1.06E-1	1.07E-3	3.98E-2	4.34E-4	-5.61E-2	9.11E-2
ODP	kg CFC-11-eq	2.49E-9	1.07E-9	1.18E-8	1.53E-8	1.99E-10	7.43E-10	1.03E-11	-2.59E-9	1.37E-8
POCP	kg ethene-eq	7.77E-5	3.46E-6	5.11E-6	8.62E-5	6.42E-7	5.59E-6	9.89E-8	-3.54E-5	5.72E-5
AP	kg SO2-eq	3.01E-4	2.48E-5	4.79E-5	3.73E-4	4.61E-6	2.85E-5	2.27E-7	-1.40E-4	2.67E-4
EP	kg PO4 3--eq	3.15E-5	4.95E-6	6.22E-6	4.27E-5	9.20E-7	5.13E-6	9.88E-8	-1.66E-5	3.22E-5
HTP	kg 1,4-DB-eq	1.61E-2	2.46E-3	8.69E-3	2.72E-2	4.58E-4	1.10E-2	3.40E-5	-7.47E-3	3.13E-2
FAETP	kg 1,4-DB-eq	5.40E-4	7.21E-5	3.13E-4	9.24E-4	1.34E-5	2.79E-4	3.67E-5	-2.65E-4	9.88E-4
MAETP	kg 1,4-DB-eq	1.12E+0	2.58E-1	8.54E-1	2.23E+0	4.79E-2	6.40E-1	3.66E-2	-4.58E-1	2.50E+0
TETP	kg 1,4-DB-eq	8.06E-5	8.73E-6	4.36E-4	5.26E-4	1.62E-6	3.31E-5	5.56E-8	-7.36E-5	4.87E-4
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	9.69E-2	5.81E-3	8.54E-3	1.11E-1	1.08E-3	4.22E-2	5.09E-4	-5.29E-2	1.02E-1
GWP-f	kg CO2 eq	9.66E-2	5.80E-3	6.88E-3	1.09E-1	1.08E-3	4.00E-2	5.09E-4	-5.80E-2	9.29E-2
GWP-b	kg CO2 eq	2.03E-4	3.52E-6	1.55E-3	1.76E-3	6.55E-7	2.25E-3	4.42E-7	5.07E-3	9.08E-3
GWP-luluc	kg CO2 eq	5.88E-5	2.05E-6	1.03E-4	1.64E-4	3.82E-7	6.26E-6	8.80E-9	-4.65E-5	1.24E-4
ODP	kg CFC11 eq	2.46E-9	1.34E-9	6.60E-9	1.04E-8	2.49E-10	8.81E-10	1.28E-11	-2.75E-9	8.79E-9
AP	mol H+ eq	3.65E-4	3.31E-5	6.05E-5	4.59E-4	6.15E-6	3.69E-5	3.05E-7	-1.70E-4	3.33E-4
EP-fw	kg P eq	1.85E-6	4.78E-8	2.22E-7	2.12E-6	8.88E-9	1.82E-7	4.02E-10	-1.02E-6	1.30E-6
EP-m	kg N eq	6.55E-5	1.18E-5	1.14E-5	8.87E-5	2.20E-6	1.11E-5	1.97E-7	-3.18E-5	7.04E-5
EP-T	mol N eq	7.25E-4	1.30E-4	1.39E-4	9.94E-4	2.42E-5	1.22E-4	1.24E-6	-3.55E-4	7.87E-4
POCP	kg NMVOC eq	3.10E-4	3.73E-5	3.25E-5	3.79E-4	6.93E-6	3.83E-5	4.64E-7	-1.48E-4	2.77E-4
ADP-mm	kg Sb eq	1.43E-6	1.50E-7	5.07E-7	2.08E-6	2.79E-8	1.44E-7	3.09E-10	-3.70E-7	1.89E-6
ADP-f	MJ	3.24E+0	8.91E-2	1.66E+0	4.99E+0	1.66E-2	1.12E-1	9.33E-4	-1.72E+0	3.40E+0
WDP	m3 depriv.	6.69E-2	2.73E-4	2.96E-2	9.68E-2	5.08E-5	2.13E-3	5.23E-6	-3.53E-2	6.37E-2
PM	disease inc.	3.33E-9	5.24E-10	5.09E-10	4.37E-9	9.74E-11	5.98E-10	6.41E-12	-1.69E-9	3.38E-9
IR	kBq U-235 eq	1.99E-3	3.89E-4	1.95E-2	2.18E-2	7.24E-5	3.44E-4	4.32E-6	-1.09E-3	2.12E-2
ETP-fw	CTUe	1.23E+0	7.24E-2	5.61E-1	1.87E+0	1.35E-2	1.31E-1	7.81E-4	-5.99E-1	1.41E+0
HTP-c	CTUh	2.48E-11	2.57E-12	1.23E-11	3.98E-11	4.79E-13	1.64E-11	2.32E-14	-1.18E-11	4.49E-11
HTP-nc	CTUh	6.92E-10	8.63E-11	3.85E-10	1.16E-9	1.60E-11	1.95E-10	5.05E-13	-3.46E-10	1.03E-9
SQP	Pt	3.56E-1	7.62E-2	4.56E-1	8.88E-1	1.42E-2	8.80E-2	2.39E-3	-9.86E-1	7.02E-3

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.65E-2	1.28E-3	2.35E-1	3.33E-1	2.38E-4	5.39E-3	3.58E-5	-1.91E-1	1.48E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.65E-2	1.28E-3	2.35E-1	3.33E-1	2.38E-4	5.39E-3	3.58E-5	-1.91E-1	1.48E-1
PENRE	MJ	3.47E+0	9.46E-2	1.67E+0	5.24E+0	1.76E-2	1.19E-1	9.90E-4	-1.85E+0	3.52E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.47E+0	9.46E-2	1.67E+0	5.24E+0	1.76E-2	1.19E-1	9.90E-4	-1.85E+0	3.52E+0
PET	MJ	3.57E+0	9.59E-2	1.91E+0	5.57E+0	1.78E-2	1.24E-1	1.03E-3	-2.04E+0	3.67E+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	1.11E-3	1.01E-5	9.45E-4	2.06E-3	1.87E-6	6.44E-5	1.15E-6	-6.14E-4	1.52E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.12E-7	2.28E-7	3.85E-8	7.79E-7	4.24E-8	1.89E-7	1.13E-9	-5.29E-7	4.82E-7
NHWD	kg	4.93E-3	5.52E-3	1.10E-3	1.16E-2	1.03E-3	5.78E-3	4.10E-3	-1.67E-3	2.08E-2
RWD	kg	1.75E-6	6.06E-7	5.77E-8	2.41E-6	1.13E-7	4.40E-7	6.08E-9	-1.01E-6	1.97E-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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