

Environmental Profile

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

Ecochain v3.5.80



Product: 3079560 - EK PP-RCT Weld-in saddle Plast GY 90x32
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	0	0	0.01	0	0	0	-0	0.01
ADPE	kg Sb-eq	9.09E-7	9.81E-8	3.19E-7	1.33E-6	1.70E-8	8.07E-8	1.90E-10	-2.04E-7	1.22E-6
ADPF	kg Sb-eq	8.73E-4	2.76E-5	2.40E-5	9.25E-4	4.79E-6	3.14E-5	2.63E-7	-4.79E-4	4.82E-4
GWP	kg CO2-eq	5.07E-2	3.76E-3	4.33E-3	5.88E-2	6.53E-4	2.13E-2	2.64E-4	-3.08E-2	5.03E-2
ODP	kg CFC-11-eq	1.17E-9	6.98E-10	7.43E-9	9.29E-9	1.21E-10	4.11E-10	6.28E-12	-1.19E-9	8.64E-9
POCP	kg ethene-eq	4.25E-5	2.26E-6	3.13E-6	4.79E-5	3.92E-7	3.12E-6	6.03E-8	-1.99E-5	3.15E-5
AP	kg SO2-eq	1.64E-4	1.62E-5	2.98E-5	2.10E-4	2.81E-6	1.59E-5	1.39E-7	-7.24E-5	1.56E-4
EP	kg PO4 3--eq	1.52E-5	3.23E-6	3.83E-6	2.22E-5	5.61E-7	2.82E-6	5.99E-8	-6.65E-6	1.90E-5
HTP	kg 1,4-DB-eq	8.32E-3	1.61E-3	5.26E-3	1.52E-2	2.79E-4	6.42E-3	2.06E-5	-3.58E-3	1.83E-2
FAETP	kg 1,4-DB-eq	2.19E-4	4.72E-5	1.90E-4	4.56E-4	8.18E-6	1.49E-4	2.21E-5	-7.09E-5	5.65E-4
MAETP	kg 1,4-DB-eq	5.79E-1	1.68E-1	5.29E-1	1.28E+0	2.92E-2	3.31E-1	2.21E-2	-2.17E-1	1.44E+0
TETP	kg 1,4-DB-eq	3.45E-5	5.70E-6	2.75E-4	3.15E-4	9.89E-7	1.98E-5	3.42E-8	-1.43E-5	3.22E-4
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.31E-2	3.80E-3	5.13E-3	6.20E-2	6.59E-4	2.14E-2	3.10E-4	-3.19E-2	5.25E-2
GWP-f	kg CO2 eq	5.29E-2	3.79E-3	4.14E-3	6.09E-2	6.58E-4	2.14E-2	3.10E-4	-3.19E-2	5.14E-2
GWP-b	kg CO2 eq	1.56E-4	2.30E-6	9.24E-4	1.08E-3	4.00E-7	1.16E-6	2.69E-7	-4.47E-5	1.04E-3
GWP-luluc	kg CO2 eq	1.64E-5	1.34E-6	6.51E-5	8.29E-5	2.33E-7	3.71E-6	5.48E-9	-6.42E-6	8.04E-5
ODP	kg CFC11 eq	1.12E-9	8.74E-10	4.14E-9	6.14E-9	1.52E-10	4.87E-10	7.79E-12	-1.27E-9	5.52E-9
AP	mol H+ eq	1.97E-4	2.16E-5	3.77E-5	2.56E-4	3.75E-6	2.06E-5	1.87E-7	-8.72E-5	1.94E-4
EP-fw	kg P eq	8.51E-7	3.12E-8	1.37E-7	1.02E-6	5.42E-9	1.07E-7	2.48E-10	-3.45E-7	7.87E-7
EP-m	kg N eq	3.24E-5	7.73E-6	6.98E-6	4.71E-5	1.34E-6	6.03E-6	1.19E-7	-1.55E-5	3.90E-5
EP-T	mol N eq	3.70E-4	8.52E-5	8.64E-5	5.41E-4	1.48E-5	6.63E-5	7.56E-7	-1.72E-4	4.51E-4
POCP	kg NMVOC eq	1.65E-4	2.44E-5	2.00E-5	2.10E-4	4.23E-6	2.09E-5	2.83E-7	-7.89E-5	1.56E-4
ADP-mm	kg Sb eq	9.09E-7	9.81E-8	3.19E-7	1.33E-6	1.70E-8	8.07E-8	1.90E-10	-2.04E-7	1.22E-6
ADP-f	MJ	1.83E+0	5.82E-2	1.05E+0	2.93E+0	1.01E-2	6.46E-2	5.70E-4	-9.87E-1	2.02E+0
WDP	m3 depriv.	3.75E-2	1.79E-4	1.83E-2	5.60E-2	3.10E-5	1.26E-3	3.56E-6	-1.69E-2	4.04E-2
PM	disease inc.	1.71E-9	3.42E-10	3.11E-10	2.36E-9	5.94E-11	3.37E-10	3.92E-12	-7.28E-10	2.03E-9
IR	kBq U-235 eq	1.00E-3	2.55E-4	1.23E-2	1.35E-2	4.42E-5	1.95E-4	2.63E-6	-4.59E-4	1.33E-2
ETP-fw	CTUe	3.41E-1	4.73E-2	3.51E-1	7.40E-1	8.20E-3	7.33E-2	4.77E-4	-1.26E-1	6.96E-1
HTP-c	CTUh	1.33E-11	1.68E-12	7.59E-12	2.26E-11	2.92E-13	9.43E-12	1.44E-14	-5.22E-12	2.71E-11
HTP-nc	CTUh	3.67E-10	5.64E-11	2.40E-10	6.63E-10	9.78E-12	1.11E-10	3.10E-13	-1.47E-10	6.38E-10
SQP	Pt	8.12E-2	4.98E-2	2.87E-1	4.18E-1	8.64E-3	5.16E-2	1.46E-3	-3.78E-2	4.42E-1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.95E-2	8.35E-4	1.48E-1	1.79E-1	1.45E-4	3.18E-3	2.17E-5	-1.41E-2	1.68E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.95E-2	8.35E-4	1.48E-1	1.79E-1	1.45E-4	3.18E-3	2.17E-5	-1.41E-2	1.68E-1
PENRE	MJ	1.96E+0	6.18E-2	1.05E+0	3.07E+0	1.07E-2	6.89E-2	6.04E-4	-1.06E+0	2.09E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.96E+0	6.18E-2	1.05E+0	3.07E+0	1.07E-2	6.89E-2	6.04E-4	-1.06E+0	2.09E+0
PET	MJ	1.99E+0	6.27E-2	1.20E+0	3.25E+0	1.09E-2	7.20E-2	6.26E-4	-1.08E+0	2.26E+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	5.91E-4	6.59E-6	5.88E-4	1.19E-3	1.14E-6	3.75E-5	6.99E-7	-2.54E-4	9.71E-4
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.55E-7	1.49E-7	2.04E-8	4.25E-7	2.58E-8	1.06E-7	6.92E-10	-2.48E-7	3.09E-7
NHWD	kg	2.36E-3	3.61E-3	5.81E-4	6.55E-3	6.26E-4	3.27E-3	2.50E-3	-7.56E-4	1.22E-2
RWD	kg	8.67E-7	3.96E-7	3.05E-8	1.29E-6	6.87E-8	2.47E-7	3.71E-9	-4.16E-7	1.20E-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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