

# Environmental Profile

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

Ecochain v3.5.80



Product: 3079562 - EK PP-RCT Weld-in saddle Plast GY 75x32  
 Unit: 1 piece  
 Manufacturer: Wavin - CZ - Kostelec - Verified

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



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.

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	☑	☑	☑	☑									

## Product stage

A1 Raw material supply A2 Transport A3 Manufacturing

## Construction process stage

A4 Transport gate to site  
 A5 Assembly / Construction installation process

## Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment  
 B6 Operational energy use B7 Operational water use

## End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing  
 C4 Disposal

## Benefits and loads beyond the system boundaries

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	0	0	0.01	0	0	0	-0	0.01
ADPE	kg Sb-eq	9.56E-7	9.41E-8	3.07E-7	1.36E-6	1.63E-8	8.66E-8	1.82E-10	-2.24E-7	1.24E-6
ADPF	kg Sb-eq	8.98E-4	2.65E-5	2.43E-5	9.49E-4	4.60E-6	3.22E-5	2.53E-7	-4.88E-4	4.98E-4
GWP	kg CO2-eq	5.50E-2	3.61E-3	4.38E-3	6.29E-2	6.27E-4	2.30E-2	2.54E-4	-3.31E-2	5.37E-2
ODP	kg CFC-11-eq	1.64E-9	6.69E-10	7.14E-9	9.45E-9	1.16E-10	4.47E-10	6.03E-12	-1.57E-9	8.45E-9
POCP	kg ethene-eq	4.51E-5	2.17E-6	3.09E-6	5.04E-5	3.76E-7	3.35E-6	5.79E-8	-2.11E-5	3.31E-5
AP	kg SO2-eq	1.81E-4	1.55E-5	2.90E-5	2.26E-4	2.70E-6	1.70E-5	1.34E-7	-8.56E-5	1.60E-4
EP	kg PO4 3--eq	1.99E-5	3.10E-6	3.76E-6	2.68E-5	5.39E-7	3.08E-6	5.75E-8	-1.09E-5	1.96E-5
HTP	kg 1,4-DB-eq	9.89E-3	1.54E-3	5.26E-3	1.67E-2	2.68E-4	6.53E-3	1.98E-5	-4.67E-3	1.88E-2
FAETP	kg 1,4-DB-eq	3.79E-4	4.52E-5	1.89E-4	6.14E-4	7.85E-6	1.62E-4	2.12E-5	-1.87E-4	6.18E-4
MAETP	kg 1,4-DB-eq	7.12E-1	1.62E-1	5.17E-1	1.39E+0	2.80E-2	3.81E-1	2.12E-2	-2.88E-1	1.53E+0
TETP	kg 1,4-DB-eq	5.21E-5	5.47E-6	2.64E-4	3.22E-4	9.50E-7	1.95E-5	3.28E-8	-5.39E-5	2.88E-4
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.73E-2	3.64E-3	5.17E-3	6.61E-2	6.32E-4	2.49E-2	2.97E-4	-3.01E-2	6.18E-2
GWP-f	kg CO2 eq	5.71E-2	3.64E-3	4.16E-3	6.49E-2	6.32E-4	2.31E-2	2.98E-4	-3.42E-2	5.47E-2
GWP-b	kg CO2 eq	1.46E-4	2.21E-6	9.40E-4	1.09E-3	3.84E-7	1.81E-3	2.58E-7	4.10E-3	6.99E-3
GWP-luluc	kg CO2 eq	4.09E-5	1.29E-6	6.25E-5	1.05E-4	2.24E-7	3.69E-6	5.27E-9	-3.50E-5	7.35E-5
ODP	kg CFC11 eq	1.65E-9	8.38E-10	3.99E-9	6.48E-9	1.46E-10	5.30E-10	7.48E-12	-1.65E-9	5.51E-9
AP	mol H+ eq	2.21E-4	2.07E-5	3.66E-5	2.79E-4	3.60E-6	2.21E-5	1.79E-7	-1.04E-4	2.00E-4
EP-fw	kg P eq	1.16E-6	2.99E-8	1.35E-7	1.32E-6	5.20E-9	1.08E-7	2.39E-10	-6.92E-7	7.42E-7
EP-m	kg N eq	4.02E-5	7.41E-6	6.88E-6	5.45E-5	1.29E-6	6.67E-6	1.15E-7	-1.98E-5	4.28E-5
EP-T	mol N eq	4.45E-4	8.17E-5	8.41E-5	6.11E-4	1.42E-5	7.34E-5	7.26E-7	-2.21E-4	4.78E-4
POCP	kg NMVOC eq	1.83E-4	2.34E-5	1.97E-5	2.26E-4	4.06E-6	2.30E-5	2.72E-7	-8.99E-5	1.64E-4
ADP-mm	kg Sb eq	9.55E-7	9.41E-8	3.07E-7	1.36E-6	1.63E-8	8.66E-8	1.82E-10	-2.24E-7	1.24E-6
ADP-f	MJ	1.87E+0	5.58E-2	1.01E+0	2.94E+0	9.70E-3	6.62E-2	5.47E-4	-1.01E+0	2.01E+0
WDP	m3 depriv.	3.93E-2	1.71E-4	1.79E-2	5.74E-2	2.98E-5	1.25E-3	3.46E-6	-2.22E-2	3.64E-2
PM	disease inc.	2.05E-9	3.28E-10	3.08E-10	2.68E-9	5.70E-11	3.57E-10	3.76E-12	-1.09E-9	2.01E-9
IR	kBq U-235 eq	1.21E-3	2.44E-4	1.18E-2	1.32E-2	4.24E-5	2.05E-4	2.52E-6	-7.03E-4	1.28E-2
ETP-fw	CTUe	8.77E-1	4.53E-2	3.40E-1	1.26E+0	7.87E-3	7.86E-2	4.58E-4	-4.36E-1	9.13E-1
HTP-c	CTUh	1.56E-11	1.61E-12	7.47E-12	2.47E-11	2.80E-13	9.92E-12	1.39E-14	-7.51E-12	2.74E-11
HTP-nc	CTUh	4.32E-10	5.41E-11	2.33E-10	7.19E-10	9.39E-12	1.16E-10	2.98E-13	-2.24E-10	6.20E-10
SQP	Pt	2.55E-1	4.78E-2	2.76E-1	5.79E-1	8.30E-3	5.20E-2	1.40E-3	-7.79E-1	-1.38E-1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.56E-2	8.01E-4	1.42E-1	2.09E-1	1.39E-4	3.18E-3	2.08E-5	-1.48E-1	6.37E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.56E-2	8.01E-4	1.42E-1	2.09E-1	1.39E-4	3.18E-3	2.08E-5	-1.48E-1	6.37E-2
PENRE	MJ	2.01E+0	5.93E-2	1.01E+0	3.08E+0	1.03E-2	7.05E-2	5.80E-4	-1.09E+0	2.08E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.01E+0	5.93E-2	1.01E+0	3.08E+0	1.03E-2	7.05E-2	5.80E-4	-1.09E+0	2.08E+0
PET	MJ	2.08E+0	6.01E-2	1.15E+0	3.29E+0	1.04E-2	7.37E-2	6.01E-4	-1.24E+0	2.14E+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	6.64E-4	6.32E-6	5.72E-4	1.24E-3	1.10E-6	3.80E-5	6.71E-7	-4.01E-4	8.81E-4
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.36E-7	1.43E-7	2.33E-8	5.03E-7	2.48E-8	1.13E-7	6.65E-10	-3.17E-7	3.24E-7
NHWD	kg	3.18E-3	3.46E-3	6.62E-4	7.31E-3	6.01E-4	3.41E-3	2.40E-3	-1.06E-3	1.27E-2
RWD	kg	1.08E-6	3.80E-7	3.49E-8	1.49E-6	6.59E-8	2.64E-7	3.56E-9	-6.52E-7	1.17E-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