Environmental Profile

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

Ecochain v3.5.80

Product:	3075860 - EK PP-RCT Weld-in saddle Plast GY 125x40
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

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

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	1.33E-6	1.45E-7	5.00E-7	1.97E-6	2.79E-8	1.33E-7	3.09E-10	-3.34E-7	1.80E-6
ADPF	kg Sb-eq	1.46E-3	4.09E-5	3.82E-5	1.54E-3	7.86E-6	5.16E-5	4.31E-7	-7.93E-4	8.10E-4
GWP	kg CO2-eq	8.44E-2	5.57E-3	6.89E-3	9.69E-2	1.07E-3	3.62E-2	4.34E-4	-5.13E-2	8.33E-2
ODP	kg CFC-11-eq	1.83E-9	1.03E-9	1.16E-8	1.45E-8	1.99E-10	6.77E-10	1.03E-11	-2.03E-9	1.34E-8
POCP	kg ethene-eq	7.15E-5	3.34E-6	4.95E-6	7.98E-5	6.42E-7	5.14E-6	9.89E-8	-3.29E-5	5.29E-5
AP	kg SO2-eq	2.69E-4	2.40E-5	4.69E-5	3.40E-4	4.61E-6	2.63E-5	2.27E-7	-1.19E-4	2.51E-4
EP	kg PO4 3−-eq	2.46E-5	4.78E-6	6.05E-6	3.54E-5	9.20E-7	4.66E-6	9.88E-8	-1.10E-5	3.01E-5
HTP	kg 1,4-DB-eq	1.36E-2	2.38E-3	8.34E-3	2.43E-2	4.58E-4	1.06E-2	3.40E-5	-5.91E-3	2.94E-2
FAETP	kg 1,4-DB-eq	3.29E-4	6.97E-5	3.01E-4	7.00E-4	1.34E-5	2.52E-4	3.67E-5	-1.17E-4	8.85E-4
MAETP	kg 1,4-DB-eq	9.17E-1	2.49E-1	8.33E-1	2.00E+0	4.79E-2	5.55E-1	3.66E-2	-3.58E-1	2.28E+0
TETP	kg 1,4-DB-eq	5.64E-5	8.44E-6	4.31E-4	4.96E-4	1.62E-6	3.24E-5	5.56E-8	-2.37E-5	5.06E-4
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	8.83E-2	5.62E-3	8.15E-3	1.02E-1	1.08E-3	3.63E-2	5.09E-4	-5.32E-2	8.68E-2
GWP-f	kg CO2 eq	8.81E-2	5.61E-3	6.58E-3	1.00E-1	1.08E-3	3.63E-2	5.09E-4	-5.31E-2	8.51E-2
GWP-b	kg CO2 eq	2.24E-4	3.41E-6	1.47E-3	1.70E-3	6.55E-7	3.58E-6	4.42E-7	-7.00E-5	1.64E-3
GWP-luluc	kg CO2 eq	2.70E-5	1.99E-6	1.02E-4	1.31E-4	3.82E-7	6.10E-6	8.80E-9	-1.06E-5	1.27E-4
ODP	kg CFC11 eq	1.74E-9	1.29E-9	6.50E-9	9.53E-9	2.49E-10	8.01E-10	1.28E-11	-2.16E-9	8.43E-9
AP	mol H+ eq	3.23E-4	3.20E-5	5.93E-5	4.14E-4	6.15E-6	3.39E-5	3.05E-7	-1.44E-4	3.11E-4
EP-fw	kg P eq	1.41E-6	4.62E-8	2.16E-7	1.67E-6	8.88E-9	1.76E-7	4.02E-10	-5.67E-7	1.29E-6
EP-m	kg N eq	5.36E-5	1.14E-5	1.10E-5	7.61E-5	2.20E-6	9.97E-6	1.97E-7	-2.57E-5	6.27E-5
EP-T	mol N eq	6.08E-4	1.26E-4	1.36E-4	8.70E-4	2.42E-5	1.10E-4	1.24E-6	-2.85E-4	7.20E-4
POCP	kg NMVOC eq	2.76E-4	3.60E-5	3.16E-5	3.44E-4	6.93E-6	3.46E-5	4.64E-7	-1.30E-4	2.56E-4
ADP-mm	kg Sb eq	1.33E-6	1.45E-7	5.00E-7	1.97E-6	2.79E-8	1.33E-7	3.09E-10	-3.34E-7	1.80E-6
ADP-f	MJ	3.06E+0	8.61E-2	1.64E+0	4.79E+0	1.66E-2	1.06E-1	9.33E-4	-1.63E+0	3.28E+0
WDP	m3 depriv.	6.23E-2	2.64E-4	2.88E-2	9.14E-2	5.08E-5	2.08E-3	5.23E-6	-2.78E-2	6.58E-2
PM	disease inc.	2.80E-9	5.07E-10	4.92E-10	3.80E-9	9.74E-11	5.55E-10	6.41E-12	-1.20E-9	3.26E-9
IR	kBq U-235 eq	1.66E-3	3.76E-4	1.92E-2	2.13E-2	7.24E-5	3.21E-4	4.32E-6	-7.57E-4	2.09E-2
ETP-fw	CTUe	5.44E-1	6.99E-2	5.52E-1	1.17E+0	1.35E-2	1.21E-1	7.81E-4	-2.08E-1	1.09E+0
HTP-c	CTUh	2.12E-11	2.49E-12	1.20E-11	3.56E-11	4.79E-13	1.53E-11	2.32E-14	-8.62E-12	4.28E-11
HTP-nc	CTUh	5.89E-10	8.34E-11	3.77E-10	1.05E-9	1.60E-11	1.83E-10	5.05E-13	-2.42E-10	1.01E-9
SQP	Pt	1.33E-1	7.37E-2	4.51E-1	6.57E-1	1.42E-2	8.48E-2	2.39E-3	-6.30E-2	6.96E-1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.94E-2	1.24E-3	2.32E-1	2.83E-1	2.38E-4	5.22E-3	3.58E-5	-2.33E-2	2.65E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.94E-2	1.24E-3	2.32E-1	2.83E-1	2.38E-4	5.22E-3	3.58E-5	-2.33E-2	2.65E-1
PENRE	MJ	3.29E+0	9.14E-2	1.65E+0	5.03E+0	1.76E-2	1.13E-1	9.90E-4	-1.76E+0	3.40E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.29E+0	9.14E-2	1.65E+0	5.03E+0	1.76E-2	1.13E-1	9.90E-4	-1.76E+0	3.40E+0
PET	MJ	3.34E+0	9.27E-2	1.88E+0	5.31E+0	1.78E-2	1.18E-1	1.03E-3	-1.78E+0	3.66E+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	9.79E-4	9.75E-6	9.25E-4	1.91E-3	1.87E-6	6.18E-5	1.15E-6	-4.18E-4	1.56E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.97E-7	2.20E-7	3.37E-8	6.51E-7	4.24E-8	1.74E-7	1.13E-9	-4.24E-7	4.45E-7
NHWD	kg	3.75E-3	5.34E-3	9.61E-4	1.01E-2	1.03E-3	5.42E-3	4.10E-3	-1.25E-3	1.94E-2
RWD	kg	1.43E-6	5.86E-7	5.05E-8	2.07E-6	1.13E-7	4.07E-7	6.08E-9	-6.88E-7	1.90E-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