

Environmental Profile

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

Ecochain v3.5.80



Product: 3079524 - EK PP-RCT SOCKET GY 110
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

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	0.08	0.01	0.02	0.11	0	0.03	0	-0.05	0.1
ADPE	kg Sb-eq	1.52E-5	1.49E-6	6.27E-6	2.30E-5	3.24E-7	1.54E-6	3.58E-9	-3.88E-6	2.10E-5
ADPF	kg Sb-eq	1.69E-2	4.20E-4	4.68E-4	1.78E-2	9.13E-5	5.99E-4	5.00E-6	-9.18E-3	9.34E-3
GWP	kg CO2-eq	9.74E-1	5.72E-2	8.45E-2	1.12E+0	1.24E-2	4.14E-1	5.04E-3	-5.92E-1	9.54E-1
ODP	kg CFC-11-eq	2.08E-8	1.06E-8	1.46E-7	1.77E-7	2.30E-9	7.85E-9	1.19E-10	-2.33E-8	1.64E-7
POCP	kg ethene-eq	8.25E-4	3.43E-5	6.12E-5	9.20E-4	7.46E-6	5.95E-5	1.15E-6	-3.81E-4	6.07E-4
AP	kg SO2-eq	3.08E-3	2.46E-4	5.85E-4	3.92E-3	5.35E-5	3.04E-4	2.63E-6	-1.38E-3	2.89E-3
EP	kg PO4 3--eq	2.82E-4	4.91E-5	7.51E-5	4.06E-4	1.07E-5	5.39E-5	1.15E-6	-1.28E-4	3.44E-4
HTP	kg 1,4-DB-eq	1.55E-1	2.45E-2	1.03E-1	2.83E-1	5.32E-3	1.23E-1	3.95E-4	-6.86E-2	3.42E-1
FAETP	kg 1,4-DB-eq	3.70E-3	7.16E-4	3.71E-3	8.13E-3	1.56E-4	2.89E-3	4.27E-4	-1.36E-3	1.02E-2
MAETP	kg 1,4-DB-eq	1.04E+1	2.56E+0	1.04E+1	2.33E+1	5.56E-1	6.38E+0	4.26E-1	-4.15E+0	2.65E+1
TETP	kg 1,4-DB-eq	6.47E-4	8.66E-5	5.41E-3	6.14E-3	1.88E-5	3.76E-4	6.44E-7	-2.78E-4	6.26E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.02E+0	5.77E-2	1.00E-1	1.18E+0	1.25E-2	4.16E-1	5.90E-3	-6.14E-1	9.98E-1
GWP-f	kg CO2 eq	1.02E+0	5.76E-2	8.08E-2	1.15E+0	1.25E-2	4.15E-1	5.91E-3	-6.13E-1	9.76E-1
GWP-b	kg CO2 eq	2.81E-3	3.50E-5	1.80E-2	2.09E-2	7.61E-6	1.86E-4	5.13E-6	-4.79E-4	2.06E-2
GWP-luluc	kg CO2 eq	3.08E-4	2.04E-5	1.28E-3	1.61E-3	4.43E-6	7.08E-5	1.02E-7	-1.25E-4	1.56E-3
ODP	kg CFC11 eq	1.97E-8	1.33E-8	8.14E-8	1.14E-7	2.89E-9	9.29E-9	1.48E-10	-2.48E-8	1.02E-7
AP	mol H+ eq	3.71E-3	3.28E-4	7.39E-4	4.77E-3	7.14E-5	3.93E-4	3.54E-6	-1.67E-3	3.58E-3
EP-fw	kg P eq	1.61E-5	4.74E-7	2.68E-6	1.93E-5	1.03E-7	2.04E-6	4.65E-9	-6.61E-6	1.48E-5
EP-m	kg N eq	6.16E-4	1.17E-4	1.37E-4	8.70E-4	2.55E-5	1.15E-4	2.29E-6	-2.98E-4	7.16E-4
EP-T	mol N eq	6.98E-3	1.29E-3	1.70E-3	9.97E-3	2.81E-4	1.27E-3	1.44E-5	-3.30E-3	8.24E-3
POCP	kg NMVOC eq	3.18E-3	3.70E-4	3.93E-4	3.94E-3	8.05E-5	4.00E-4	5.39E-6	-1.51E-3	2.92E-3
ADP-mm	kg Sb eq	1.52E-5	1.49E-6	6.27E-6	2.30E-5	3.24E-7	1.54E-6	3.58E-9	-3.88E-6	2.10E-5
ADP-f	MJ	3.55E+1	8.85E-1	2.06E+1	5.70E+1	1.92E-1	1.23E+0	1.08E-2	-1.89E+1	3.95E+1
WDP	m3 depriv.	7.18E-1	2.71E-3	3.59E-1	1.08E+0	5.90E-4	2.41E-2	5.91E-5	-3.22E-1	7.82E-1
PM	disease inc.	3.22E-8	5.20E-9	6.08E-9	4.35E-8	1.13E-9	6.43E-9	7.44E-11	-1.39E-8	3.72E-8
IR	kBq U-235 eq	1.91E-2	3.87E-3	2.42E-1	2.64E-1	8.41E-4	3.72E-3	5.01E-5	-8.79E-3	2.60E-1
ETP-fw	CTUe	6.19E+0	7.18E-1	6.90E+0	1.38E+1	1.56E-1	1.40E+0	9.06E-3	-2.43E+0	1.29E+1
HTP-c	CTUh	2.43E-10	2.56E-11	1.49E-10	4.17E-10	5.56E-12	1.76E-10	2.68E-13	-1.00E-10	4.98E-10
HTP-nc	CTUh	6.75E-9	8.56E-10	4.71E-9	1.23E-8	1.86E-10	2.12E-9	5.85E-12	-2.81E-9	1.18E-8
SQP	Pt	1.53E+0	7.57E-1	5.65E+0	7.94E+0	1.65E-1	9.84E-1	2.78E-2	-7.89E-1	8.32E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.68E-1	1.27E-2	2.92E+0	3.50E+0	2.76E-3	6.06E-2	4.17E-4	-2.81E-1	3.28E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.68E-1	1.27E-2	2.92E+0	3.50E+0	2.76E-3	6.06E-2	4.17E-4	-2.81E-1	3.28E+0
PENRE	MJ	3.80E+1	9.39E-1	2.07E+1	5.97E+1	2.04E-1	1.31E+0	1.15E-2	-2.04E+1	4.08E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.80E+1	9.39E-1	2.07E+1	5.97E+1	2.04E-1	1.31E+0	1.15E-2	-2.04E+1	4.08E+1
PET	MJ	3.86E+1	9.52E-1	2.36E+1	6.32E+1	2.07E-1	1.37E+0	1.19E-2	-2.07E+1	4.41E+1
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	1.12E-2	1.00E-4	1.15E-2	2.28E-2	2.18E-5	7.16E-4	1.33E-5	-4.86E-3	1.87E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.57E-6	2.26E-6	3.90E-7	7.22E-6	4.92E-7	2.02E-6	1.31E-8	-4.85E-6	4.89E-6
NHWD	kg	4.31E-2	5.48E-2	1.11E-2	1.09E-1	1.19E-2	6.26E-2	4.77E-2	-1.45E-2	2.17E-1
RWD	kg	1.64E-5	6.02E-6	5.84E-7	2.30E-5	1.31E-6	4.72E-6	7.06E-8	-7.98E-6	2.11E-5
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