

# Environmental Profile

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

Ecochain v3.5.80



Product: 3079519 - EK PP-RCT SOCKET GN 75  
 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	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 non-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	0.03	0	0.01	0.04	0	0.01	0	-0.02	0.04
ADPE	kg Sb-eq	5.96E-6	5.52E-7	2.26E-6	8.78E-6	1.17E-7	5.79E-7	1.29E-9	-1.46E-6	8.01E-6
ADPF	kg Sb-eq	6.57E-3	1.55E-4	1.73E-4	6.90E-3	3.30E-5	2.22E-4	1.81E-6	-3.50E-3	3.66E-3
GWP	kg CO2-eq	3.89E-1	2.12E-2	3.13E-2	4.41E-1	4.49E-3	1.75E-1	1.82E-3	-2.34E-1	3.89E-1
ODP	kg CFC-11-eq	9.28E-9	3.93E-9	5.26E-8	6.59E-8	8.33E-10	2.98E-9	4.32E-11	-1.04E-8	5.93E-8
POCP	kg ethene-eq	3.32E-4	1.27E-5	2.24E-5	3.68E-4	2.70E-6	2.26E-5	4.15E-7	-1.44E-4	2.50E-4
AP	kg SO2-eq	1.25E-3	9.11E-5	2.12E-4	1.56E-3	1.93E-5	1.16E-4	9.53E-7	-5.40E-4	1.15E-3
EP	kg PO4 3--eq	1.22E-4	1.82E-5	2.74E-5	1.68E-4	3.86E-6	2.08E-5	4.15E-7	-5.60E-5	1.37E-4
HTP	kg 1,4-DB-eq	6.61E-2	9.05E-3	3.78E-2	1.13E-1	1.92E-3	4.58E-2	1.43E-4	-2.79E-2	1.33E-1
FAETP	kg 1,4-DB-eq	1.82E-3	2.65E-4	1.36E-3	3.45E-3	5.63E-5	1.20E-3	1.54E-4	-7.27E-4	4.13E-3
MAETP	kg 1,4-DB-eq	4.58E+0	9.47E-1	3.77E+0	9.30E+0	2.01E-1	2.65E+0	1.54E-1	-1.68E+0	1.06E+1
TETP	kg 1,4-DB-eq	2.99E-4	3.21E-5	1.95E-3	2.28E-3	6.81E-6	1.38E-4	2.33E-7	-1.79E-4	2.25E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.05E-1	2.14E-2	3.70E-2	4.64E-1	4.53E-3	1.79E-1	2.13E-3	-2.34E-1	4.15E-1
GWP-f	kg CO2 eq	4.05E-1	2.13E-2	2.98E-2	4.56E-1	4.53E-3	1.76E-1	2.13E-3	-2.42E-1	3.97E-1
GWP-b	kg CO2 eq	3.69E-4	1.30E-5	6.69E-3	7.07E-3	2.75E-6	3.49E-3	1.85E-6	7.65E-3	1.82E-2
GWP-luluc	kg CO2 eq	1.79E-4	7.55E-6	4.62E-4	6.48E-4	1.60E-6	2.60E-5	3.69E-8	-1.01E-4	5.75E-4
ODP	kg CFC11 eq	9.01E-9	4.92E-9	2.94E-8	4.33E-8	1.04E-9	3.53E-9	5.36E-11	-1.11E-8	3.68E-8
AP	mol H+ eq	1.52E-3	1.22E-4	2.68E-4	1.91E-3	2.58E-5	1.50E-4	1.28E-6	-6.53E-4	1.43E-3
EP-fw	kg P eq	7.28E-6	1.76E-7	9.79E-7	8.44E-6	3.73E-8	7.53E-7	1.68E-9	-3.10E-6	6.13E-6
EP-m	kg N eq	2.61E-4	4.35E-5	5.00E-5	3.54E-4	9.23E-6	4.48E-5	8.27E-7	-1.20E-4	2.89E-4
EP-T	mol N eq	2.93E-3	4.79E-4	6.16E-4	4.02E-3	1.02E-4	4.93E-4	5.19E-6	-1.33E-3	3.29E-3
POCP	kg NMVOC eq	1.30E-3	1.37E-4	1.43E-4	1.58E-3	2.91E-5	1.55E-4	1.95E-6	-5.86E-4	1.18E-3
ADP-mm	kg Sb eq	5.96E-6	5.52E-7	2.26E-6	8.78E-6	1.17E-7	5.79E-7	1.29E-9	-1.46E-6	8.01E-6
ADP-f	MJ	1.37E+1	3.28E-1	7.44E+0	2.15E+1	6.95E-2	4.57E-1	3.91E-3	-7.18E+0	1.48E+1
WDP	m3 depriv.	2.85E-1	1.01E-3	1.31E-1	4.16E-1	2.13E-4	8.85E-3	2.17E-5	-1.29E-1	2.96E-1
PM	disease inc.	1.34E-8	1.93E-9	2.23E-9	1.75E-8	4.09E-10	2.43E-9	2.69E-11	-5.82E-9	1.46E-8
IR	kBq U-235 eq	8.05E-3	1.43E-3	8.70E-2	9.65E-2	3.04E-4	1.39E-3	1.81E-5	-3.75E-3	9.45E-2
ETP-fw	CTUe	3.62E+0	2.66E-1	2.50E+0	6.39E+0	5.64E-2	5.29E-1	3.27E-3	-1.49E+0	5.48E+0
HTP-c	CTUh	1.01E-10	9.46E-12	5.43E-11	1.65E-10	2.01E-12	6.80E-11	9.71E-14	-4.19E-11	1.93E-10
HTP-nc	CTUh	2.81E-9	3.17E-10	1.71E-9	4.83E-9	6.73E-11	8.05E-10	2.12E-12	-1.19E-9	4.52E-9
SQP	Pt	9.97E-1	2.80E-1	2.04E+0	3.31E+0	5.95E-2	3.64E-1	1.00E-2	-1.70E+0	2.05E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.04E-1	4.70E-3	1.05E+0	1.36E+0	9.97E-4	2.23E-2	1.50E-4	-3.57E-1	1.02E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.04E-1	4.70E-3	1.05E+0	1.36E+0	9.97E-4	2.23E-2	1.50E-4	-3.57E-1	1.02E+0
PENRE	MJ	1.47E+1	3.48E-1	7.46E+0	2.25E+1	7.38E-2	4.87E-1	4.15E-3	-7.75E+0	1.53E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.47E+1	3.48E-1	7.46E+0	2.25E+1	7.38E-2	4.87E-1	4.15E-3	-7.75E+0	1.53E+1
PET	MJ	1.50E+1	3.52E-1	8.51E+0	2.39E+1	7.48E-2	5.10E-1	4.30E-3	-8.11E+0	1.64E+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	4.67E-3	3.71E-5	4.19E-3	8.90E-3	7.86E-6	2.68E-4	4.81E-6	-2.07E-3	7.10E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.96E-6	8.38E-7	1.54E-7	2.95E-6	1.78E-7	7.63E-7	4.73E-9	-2.17E-6	1.73E-6
NHWD	kg	1.93E-2	2.03E-2	4.40E-3	4.40E-2	4.31E-3	2.42E-2	1.72E-2	-5.96E-3	8.38E-2
RWD	kg	6.97E-6	2.23E-6	2.31E-7	9.43E-6	4.73E-7	1.78E-6	2.55E-8	-3.46E-6	8.24E-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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